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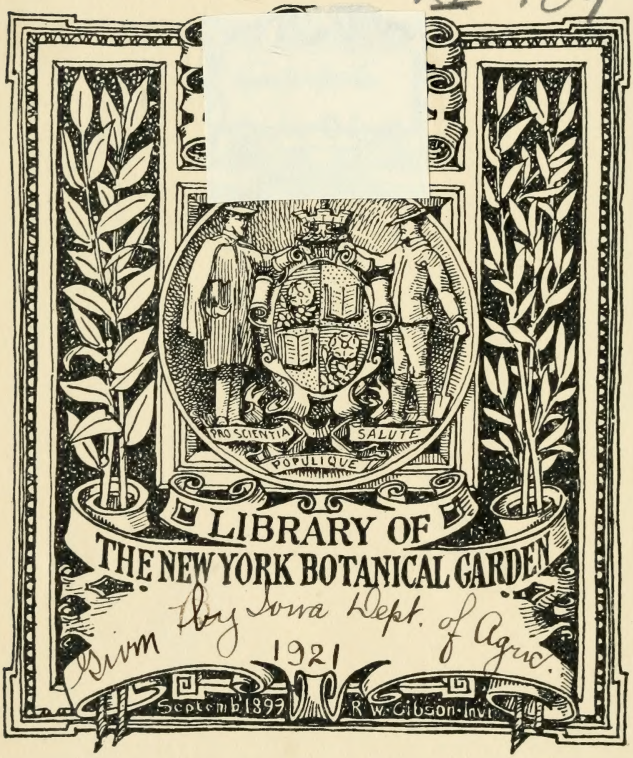
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1921

TWENTY-FIRST ANNUAL

IOWA YEAR BOOK
OF
AGRICULTURE

ISSUED BY THE

IOWA DEPARTMENT OF AGRICULTURE

1920

Published by
THE STATE OF IOWA
Des Moines

.09
1920

LETTER OF TRANSMITTAL

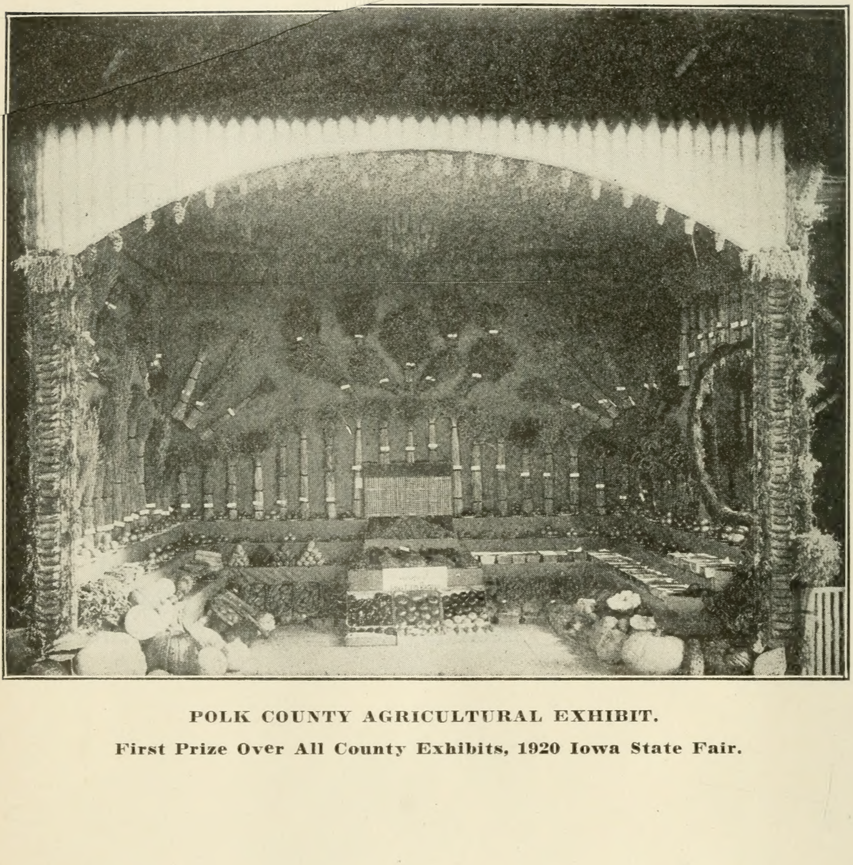
OFFICE OF IOWA STATE DEPARTMENT OF AGRICULTURE.

Des Moines, Iowa, July 1, 1921.

To His Excellency, N. E. Kendall, Governor of Iowa:

Sir: I have the honor to transmit herewith the Twenty-first Annual Iowa Year Book of Agriculture for the year 1920.

ARTHUR R. COREY,
Secretary State Board of Agriculture.



POLK COUNTY AGRICULTURAL EXHIBIT.

First Prize Over All County Exhibits, 1920 Iowa State Fair.

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INTRODUCTORY

In studying the pages which follow, one cannot be anything but impressed by the remarkable story of agricultural progress which is written in them. It is the story of Iowa's greatest industry and of Iowa's greatest source of wealth.

Few of our early pioneers, whose works were reflected in the First Volume of this yearbook, would have believed that such things were possible as are recorded in this, the Twenty-first Volume. The table of Iowa's Source of Wealth, which shows the state's 1920 agricultural products and live stock totaling a value of $1,175,504,318, is mute testimony to the wonderful strides which have been made by the farming peoples of the commonwealth.

The sections devoted to the Iowa State Fair, Farm Bureau Federation, Corn Belt Meat Producers' Association, Weather and Crop Service, and like institutions, record an equally graphic picture of rapid and wholesome advancement.

True Iowans should know the story which is told in the pages that follow. And Iowa farmers may well be proud of the part they have played in the making of the story.

DEC 8 - 1921

STATE BOARD OF AGRICULTURE
1921

EX-OFFICIO MEMBERS

N. E. Kendall, *Governor of State*	Des Moines
R. A. Pearson, *President Iowa State College*	Ames
W. B. Barney, *State Dairy Commissioner*	Des Moines
Peter Malcolm, *State Veterinarian*	Des Moines

OFFICERS

C. E. Cameron, *President*	Alta
J. P. Mullen, *Vice-President*	Fonda
A. R. Corey, *Secretary*	Des Moines
W. W. Morrow, *Treasurer*	Afton

DISTRICT MEMBERS

First District—H. O. Weaver	Wapello
Second District—E. T. Davis	Iowa City
Third District—E. M. Reeves	Waverly
Fourth District—E. J. Curtin	Decorah
Fifth Disrict—Cyrus A. Tow	Norway
Sixth District—T. C. Legoe	What Cheer
Seventh District—C. F. Curtiss	Ames
Eighth District—Frank E. Sheldon	Mt. Ayr
Ninth District—Chas. Escher, Jr.	Botna
Tenth District—Sears McHenry	Denison
Eleventh District—H. L. Pike	Whiting

The President, Vice-President, Secretary and Treasurer are elected for one year.

Terms of the Directors for even-numbered Districts expire second Wednesday in December, 1920. Terms of Directors for odd-numbered Districts expire second Wednesday in December, 1921.

STANDING COMMITTEES

Executive

C. E. Cameron
J. P. Mullen
A. R. Corey

Auditing

F. E. Sheldon
E. M. Reeves
H. L. Pike

Resolutions

E. J. Curtin
H. O. Weaver
T. C. Legoe

Powers and Duties of Board

C. E. Cameron
J. P. Mullen
A. R. Corey
E. M. Reeves
C. F. Curtiss

Adulteration of Foods, Seeds and Other Products

R. A. Pearson
C. A. Tow
W. B. Barney

Noxious Weeds, Fungus Diseases in Grains, Grasses, Etc.

E. M. Reeves
Chas. Escher, Jr.
E. T. Davis

Dairying and Dairy Products

W. B. Barney
C. F. Curtiss
Sears McHenry

Animal Husbandry

C. F. Curtiss
E. T. Davis
R. D. Wall

Legislative

C. E. Cameron
J. P. Mullen
A. R. Corey
H. O. Weaver
E. J. Curtin

Revision of Premium List

C. E. Cameron
J. P. Mullen
A. R. Corey
T. C. Legoe
C. F. Curtiss
H. L. Pike

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PART IV.

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PART V.

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State Dairy Commissioner's report for the year 1920.

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PART VIII.

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Farm Statistics for the year ending December 31, 1920. Collected by township assessors and reported to the Department of Agriculture by the County Auditors; compiled by the Iowa Weather and Crop Service Bureau.

PART X.

Statistical Tables of Iowa's principal farm crops. Also statistical tables of farm crops and live stock by states, the United States and the World.

IOWA'S SOURCE OF WEALTH

DECEMBER 31, 1920

Compiled for the Iowa Year Book of Agriculture from Estimates Furnished by the Iowa Co-operative Crop Reporting Service, Showing Acreage, Average Yield and Total Yield of Farm Products.

Crop	Acres	Average Yield	Averag Price	Total Yield	Total Value
Corn	10,300,000	46.0 bu.	$ 0.47	473,800,000	$ 222,686,000
Oats	5 893,600	39.0 bu.	0.36	229,850,400	82,746,144
Spring Wheat	400,000	11.3 bu.	1.35	4,520,000	6,102,000
Winter Wheat	431,000	19.7 bu.	1.41	8,490,700	11,971,887
Barley	284,000	27.5 bu.	0.63	7,810,000	4,920,300
Rye	80,000	16.2 bu.	1.17	1,296,000	1,516,320
Flax Seed	12,000	10.0 bu.	1.80	120,000	216,000
Timothy Seed	270,000	4.9 bu.	3.00	1,323,000	3,969,000
Clover Seed	134,000	2.0 bu.	11.65	268,000	3,122,200
Potatoes	104,500	110.0 bu.	1.22	11,495,350	14,024,327
Hay, Tame, excluding Alfalfa	3,020,850	1.44 tons	16.24	4,349,620	70,637,829
Hay, Wild	510,000	1.27 tons	12.69	647,700	8,219,313
Alfalfa	200,000	2.84 tons	19.23	568,140	10,925,332
Pasture and Grazing	10,137,680		7.01		71,065,136
Ensilage, estimated					25,000,000
Sweet Corn					1,960,000
Pop Corn	30,000	30.0 bu.	3.23	900,000	2,907,000
Buckwheat	7,500	17.0 bu.	1.34	127,500	170,850
Fruit Crop, estimated					7,000,000
Garden Truck, estimated					4,000,000
Sugar Beets for Manufacture	17,250	9.2 tons	11.34	158,750	1,801,000
Miscellaneous Crops, estimated					5,500,000
Total					$ 560,460,638
Dairy Products (estimated)					$ 100,000,000
Poultry and Eggs (estimated)					76,365,000
Wool, 4,908,000 lbs. at 21 cents					1,030,680
Total value of farm products					$ 737,856,318

NUMBER, AVERAGE VALUE AND TOTAL VALUE OF LIVE STOCK

DECEMBER 31, 1920.

Figures taken from estimates made by the United States Department of Agriculture.

	Number	Average Value	Total Value
Horses	1,328,000	$ 81.00	$ 107,568,000
Mules	71,000	108.00	7,668,000
Milk Cows	1,252,000	62.00	77,624,000
Other Cattle	2,969,000	33.80	100,352,000
Swine	9,510,000	14.50	137,895,000
Sheep	948,000	6.90	6,541,000
Total value of live stock			$ 437,648,000
Total value of farm products and live stock			$1,175,504,318

PART I

Synopsis of Proceedings of the Iowa State Board of Agriculture and Executive and Special Committee Meetings for the Year 1920

EXECUTIVE COMMITTEE MEETING.

December 12, 1919.

Members present: Cameron, Mullen and Corey.

The committee authorized payment of the first estimate on the new cattle barn and directed the secretary to issue a warrant in favor of Mr. J. E. Lovejoy, contractor, for $5,674, in payment for same.

The claim of Mr. J. E. Lovejoy in settlement of contract for constructing the entrances at Grand Avenue, Walnut Street and University Avenues, amounting to $1,493.14, was presented to the committee. The committee directed the secretary to issue warrant for $1,443.14 and to withhold $50 until the turnstiles and electric light outlets on the Grand Avenue entrance are completed.

The committee fixed the salary of Mr. Frank Harris, Chief Clerk, Stallion Registration Division, at $150 per month commencing January 1, 1920.

The committee authorized the secretary to employ Mr. H. L. Cook to assist in getting out the January edition of Greater Iowa.

The committee had a conference with the Board of Control relative to using the roof off of brick cattle barn No. 2 in constructing a building to house the Board of Control exhibit. The members of the Board of Control informed the committee that while they appreciated the offer made by the committee inasmuch as their support funds were practically all overdrawn, there were no available funds for constructing this building.

The committee authorized the superintendent to wreck brick cattle barn No. 2 and to sell the brick and lumber to Mr. Lovejoy, contractor for the new cattle barn, and to dispose of the metal shingles to the Backman Sheet Metal Works, who have a sub-contract for the sheet metal work on the new cattle barn.

The secretary was authorized to settle the claim of Mrs. Florence O. Bossenberger, Williamsburg, Iowa; Mrs. Lizzie Ritzinger, Sigourney, Iowa; Mrs. G. E. Stephenson, Eddyville, Iowa, for canned goods that were spoiled and lost during the state fair; also the claim of George Koch, Brighton, Iowa, for grain sacks and damage and loss of grain exhibits.

The committee agreed to meet at Sioux City on January 27 to meet with other members of the Iowa, Minnesota and South Dakota Racing Circuit for the purpose of arranging speed program.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

January 8-9, 1920.

Members present: Cameron and Corey.

The classifications arranged by F. P. Reed, Rex Beresford and Secretary Corey for the Boys' and Girls' Calf Feeding Contest calling for an appropriation of $500, the Boys' and Girls' Heifer Club calling for $600 and the Pig Club contest calling for $550, which were authorized by the Board, were approved by the committee.

The proposition from the National Duroc Jersey Record Association to offer $600 in two futurities at the Iowa State Fair this year, providing the fair management would add $200 to this amount was accepted by the committee.

The request of Dr. Lenna L. Means, Director of the Baby Health Department, that they be granted the use of the Baby Health rooms in the Women and Children's Building to put on a half-day demonstration of measuring and weighing babies during the National Convention of the Federation of Women's Clubs in June was granted.

Upon the recommendation of C. F. Curtiss, superintendent of the horse department, the secretary was directed to pay Mr. F. H. Divan, Monroe, Wisconsin, $50 for exhibiting his Four-in-Hand pony team each evening in the Stock Pavilion during the horse show.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

January 22-23, 1919.

Members present: Cameron, Mullen and Corey.

The purpose of the meeting was to consider the following propositions made by Mr. Chas. Hutchinson of the firm of Clark, Byers and Hutchinson, Attorneys for Matilda A. Winterrowd.

"Feb. 12, 1920.

Mr. F. C. Davidson, State House,
City.

Dear Mr. Davidson:

Referring to our conversation with regard to an attempt to settle the condemnation matter of State against Winterrowd, in which land is being taken for the State Fair grounds, will say that our client is willing to accept in full settlement of the matter the sum of $16,436 with interest thereon at 6% from the date of the award, State also paying the costs. This is $2,000 more than the amount given by the sheriff's jury.

If this is satisfactory to the State, kindly advise us and we will complete the settlement. If the State does not care to settle, however, we would be glad to know it as soon as possible as we wish to get the case tried and out of the way.

Yours very truly,
(Signed) Chas. Hutchinson."

The land in question consists of Lot No. 2 of the L. D. Sims Estate, and contains 9.55 acres. It was condemned on June 16, 1919, by sheriff's jury.

The committee informed Mr. Hutchinson that they could not accept this proposition but would make a counter proposition to pay Miss Winterrowd on the basis of the amount paid Stella M. Henderson for Lot No. 3, $1,305.55 per acre, and allow in addition to this $2,500 for the house with interest on the full amount from the date of award and expense of appeal up to date. Mr. Hutchinson stated he would not recommend that his client accept this proposition.

The committee also proposed to Mr. Hutchinson that Miss Winterrowd accept $12,000 of the money on deposit with the sheriff without prejudice to their case. Mr. Hutchinson stated he would recommend that his client do this.

The committee met Mr. R. T. St. John, Deputy Fish and Game Warden, and discussed the matter of a location for a Fish and Game Building upon the Iowa State Fair Grounds. The committee informed Mr. St. John that they would provide a suitable location for the building but that the board was not in a position to financially assist in constructing the building. Mr. St. John stated in his opinion this was a fair proposition and that he would give Mr. Albert, State Fish and Game Warden, this information.

The committee also discussed the proposition of locating a riding device known as "The Old Mill" upon the state fair grounds.

President Cameron directed the secretary to issue a call for the board meeting to convene at ten o'clock February 4.

MEETING OF STATE BOARD OF AGRICULTURE.

February 4, 1920.

The board convened at ten o'clock a. m. February 4 in the Agricultural Rooms, State House, with President Cameron presiding.

Upon roll call the following members answered: Cameron, Mullen, Corey, Reeves, Curtin, Sheldon, Tow and Curtiss.

Members absent: Weaver, Davis, Pike, Escher, McHenry and Morrow.

Mr. Albert, State Fish and Game Warden, and Mr. St. John, Deputy State Fish and Game Warden, appeared before the board and presented a tentative plan for the proposed Fish and Game Building on the Iowa State Fair Grounds. The proper location for the building was discussed by the board. Mr. Curtin moved that the Executive Committee be authorized to select a location for the Fish and Game Building. Mr. Reeves seconded the motion and motion prevailed. It was agreed that representatives from the Fish and Game Department should accompany the Executive Committee to the grounds to look over available locations.

Ruth Law was called before the board and she presented a proposition for "Ruth Law's Flying Circus," featuring Al Wilson changing planes in the air without the aid of a rope ladder. Her proposition was $9,000 for six days' flying. The board decided to consider the proposition and made arrangements to meet Miss Law that evening to discuss the matter further with her.

Secretary Corey read an estimate of the expense for the 1920 fair.

The board discussed at length the probable cost of the 1920 fair and the necessity of increasing the revenue for the coming year.

The advisability of increasing the admission at the outside gates from fifty cents to seventy-five cents was discussed but no action was taken.

Mr. Davidson and Mr. Lyon of the attorney general's office were called in for consultation in regard to the case of State of Iowa vs. Matilda Winterrowd. Mr. Davidson and Mr. Lyon advised that the case be settled out of court. After Secretary Corey and Mr. Davidson had explained the present status of the case to the board, Mr. Curtiss moved that the Executive Committee be authorized to make settlemnet for the land in question at the best terms possible, not exceeding $1,200 over the jury's award and interest on the total sum from date of award and court costs. Mr. Reeves seconded the motion. The motion carried.

Mr. Curtin moved that the board adjourn until ten a. m. Thursday, February 5. The motion was seconded by Mr. Sheldon and carried.

February 5, 1920.

The board was called to order by President Cameron at ten a. m. Thursday, February 5.

Those answering to roll call were: Cameron, Corey, Reeves, Curtin, Tow, Sheldon, Curtiss and Mullen.

Those absent were: Morrow, Weaver, Davis, Legoe, Escher and McHenry.

Mr. Corey read a brief of the minutes of board and executive committee meetings. On motion of Mr. Curtin the minutes were approved.

Secretary Corey informed the board that a committee from the Iowa Federation of Women's Clubs had called at the office and asked permission to use the entire Women and Children's Building during the National Conference in June, 1920. The committee asked that the state fair management take care of the expense for cleaning the building before and after the conference. After due consideration by the board Mr. Reeves moved that the use of the Women and Children's Building be donated to the National Federation of Women's Clubs during the conference and that the necessary expense for cleaning the building be borne by the federation. Mr. Sheldon seconded the motion. The motion prevailed.

The proposition made by the Keenan-Mahan Construction Company for building an "Old Mill" on the Iowa State Fair Grounds was brought to the attention of the board. The proposition was for them to pay 30 per cent of the gross receipts for the coaster and Old Mill. It was the sense of the board that the state fair should receive a larger percentage of the gross receipts from the coaster or purchase it outright.

After much discussion Mr. Mullen moved that the executive committee be authorized to negotiate a new contract with the Keenan and Mahan Construction Company for the roller coaster and for the erection of an Old Mill at a percentage satisfactory to both parties. In the event of failure to negotiate an agreement the executive committee be authorized to purchase the roller coaster on the terms of the contract. The motion was seconded by Mr. Sheldon and carried.

Mr. Mullen, Superintendent of the Machinery Department, said he should like an expression from the board as to what they deemed advisable to do with regard to the Dodd and Struthers Building; that is, whether the state fair board should buy the building or charge rent for the lot. Mr. Reeves moved that the superintendent of the machinery department charge $250 for the lot on which the Dodd and Struthers Building now stands. The motion was seconded by Mr. Sheldon and carried.

President Cameron asked what the members of the board would recommend with reference to Ruth Law's Flying Circus. Mr. Cameron explained that Miss Law had agreed to give seven days' flying instead of six as per her original proposition for $9,000. Mr. Tow moved that the executive committee be authorized to enter into contract with Ruth Law as per her proposition to the committee at the Savery Hotel Wednesday evening, February 4. The motion was seconded by Mr. Curtin and carried. Miss Law was called before the board and was informed that her proposition had been accepted.

President Cameron declared the revision of the premium list was the next order of business and called upon the superintendent of the horse department for his recommendations.

Dean Curtiss, Superintendent of the Horse Department, recommended an increase of $4,205 for draft horses, $1,970 for the saddle horse classes, $426 for horse show classes, $100 for pony classes and $150 for mules, making a total increase of $6,851. He recommended that the stall rent in the horse department be increased $1.00 per stall.

Mr. Tow, Superintendent of the Swine Department, recommended that the six principal breeds of swine be increased from $618 to $850 and that $100 be added to the Duroc Jersey Futurity. This would call for an increase of $1,429 over last year.

Mr. Curtin recommended the following program for the speed department, which calls for an increase of $3,400 over last year.

FUTURITIES

Iowa State Fair Futurity No. 5 (closed) trotting division, estimated	$1,000	Saturday,	Aug. 28
Iowa State Fair Futurity No. 5 (closed) pacing division, estimated	400	Saturday,	Aug. 28
2:14 trot, "The Great Western," added money	1,500	Tuesday,	Aug. 31
2:13 pace, "The Hawkeye," added money	1,500	Monday,	Aug. 30
Two-year-old trot, added money	400	Saturday,	Aug. 28
Two-year-old pace, added money	300	Saturday,	Aug. 28

LATE CLOSING EVENTS.

2:25 trot, added money	$1,000	Tuesday,	Aug. 31
2:20 trot, added money	1,000	Thursday,	Sept. 2
2:16 trot, added money	1,000	Wednesday,	Sept. 1
2:13 trot, added money	1,000	Monday,	Aug. 30
2:10 trot, added money	1,000	Wednesday,	Sept. 1
2:20 pace, added money	1,000	Wednesday,	Sept. 1
2:16 pace, added money	1,000	Tuesday,	Aug. 31
2:11 pace, added money	1,000	Monday,	Aug. 30
2:09 pace, added money	1,000	Thursday,	Sept. 2
Free-for-all pace, added money	1,000	Tuesday,	Aug. 31

RUNNING RACES.

State Fair Derby, 1¼ mile, added money	$ 400	Saturday,	Aug. 28
1 mile dash, added money	150	Monday,	Aug. 30
1 mile dash, added money	150	Wednesday,	Sept. 1
6 furlong dash, added money	150	Thursday,	Sept. 2
6 furlong dash, added money	150	Tuesday,	Aug. 31
5 furlong dash, added money	125	Saturday,	Aug. 28
5 furlong dash, added money	125	Monday,	Aug. 30
5 furlong dash, added money	125	Wednesday,	Sept. 1
5 furlong dash, added money	125	Thursday,	Sept. 2
4½ furlong dash, added money	125	Saturday,	Aug. 28
4½ furlong dash, added money	125	Tuesday,	Aug. 31
4½ furlong dash, added money	125	Thursday,	Sept. 2

Mr. Reeves, Superintendent of the Horticultural department, stated the revision recommended for his department would call for $220 additional prize money this year.

Mr. Mullen, Superintendent of the Machinery Department, said he felt the rental charge for space in the Machinery Department should be increased this year. He recommended that 25c per running foot with a minimum of $5.00 be charged for outside space, that the rental for Power Hall be increased from $600 to $1,000 for the entire building and that space in Machinery Hall be increased to 20c per square foot. There was some discussion in regard to the charge of 20c per square foot for space in Machinery Hall. Mr. Sheldon moved that it is the sense of the board that 20c per foot be asked for space in Machinery Hall and that the other recommendations made by Mr. Mullen be adopted. The motion was seconded by Mr. Reeves and carried.

On account of Mr. Pike's absence his recommendations were presented to the board by Secretary Corey. The recommendations follow:

Add to Shorthorn classes	$1,050
Add to Milking Shorthorn class	200
Add to Angus classes	400
Add to Red Polled class	66
Add to classes for four dairy breeds	2,000
Add to Brown Swiss class	145
Add to Hereford classes	1,300
Total increase	$5,161

Mr. Escher, Superintendent of the Sheep Department, was absent, so Secretary Corey informed the board that the Hampshire breeders had asked for an Iowa class for that breed. Dean Curtiss moved that a new class be added for Iowa Hampshire Sheep. The motion was seconded by Mr. Tow and carried. Mr. Corey stated that Mr. Escher had recommended at the December board meeting that the pen rent in the sheep department be increased from $1.00 to $2.00.

Mr. J. W. Coverdale, Assistant Superintendent of the Agricultural Department, presented the recommendations for changes in the Agricultural classification, which were as follows:

Add first prizes of $10 in potato class	$ 90
Add to potato collection	50
Add $10 to displays of onions, peppers and tomatoes	30
Add $200 in place of $150 for each county exhibit that qualifies	1,200
Add $150 in place of $125 for each individual farm exhibit that qualifies	500
Total increase	$1,870

Secretary Corey presented the recommendations for the Poultry Department. These recommendations asked for additional cooping to coop the show and to take care of the junior poultry show to be staged this year; also that the rabbit exhibit be provided a separate building.

The secretary presented recommendations for the rabbit department, calling for $48 increase in premiums, a reduction in entry fee from fifty cents to twenty-five cents per rabbit and a separate building in which to stage the show. The secretary also announced if the board adopted the classification calling for $324 as recommended that the rabbit breeders would agree to add 50 per cent or $162.

President Cameron asked the board if they had any one in mind whom they would recommend for superintendent of the Floricultural Department this year inasmuch as Mr. Greene had resigned. Mr. Reeves suggested that the florists of Des Moines be allowed to recommend a man whom they would like for superintendent this year.

Mr. Cameron brought up the matter of amateur classes in the cattle department and asked if the board thought it wise to eliminate all amateur exhibitors who had competed last year, and in case they were eliminated would there be a sufficient number of new exhibitors in Iowa to put on a creditable show in these classes. The matter was given careful thought by the board and Dean Curtiss moved that competition in the amateur classes be limited to Iowa breeders who have never shown cattle at the Iowa State Fair and amateur exhibitors at previous fairs who have not won a first premium in any class. The motion was seconded by Mr. Sheldon. The motion prevailed.

President Cameron asked what the board wished to do with regard to the various recommendations made by the superintendents with reference to revision of the premium list, stall, pen rent, etc. Mr. Curtin moved that the recommendations as made by the various superintendents be adopted. Seconded by Mr. Sheldon and carried.

The following is the amount appropriated for premiums for the 1920 fair compared with 1919:

	1919	1920	Increase
Horses	$ 19,044.00	$ 25,895.00	$ 6,851.00
Speed	13,675.00	17,000.00	3,325.00
Cattle	19,777.00	24,443.00	4,666.00
Swine	5.545.00	7,112.00	1,567.00
Sheep	4,264.00	4,430.00	166.00
Goats	400.00	400.00	....
Poultry	2,381.00	2,381.00	....
Rabbits	276.00	324.00	48.00
Agriculture	9,013.00	10,883.00	1,870.00
Culinary	846.00	846.00	....
Honey, Bees, etc	497.00	497.00	....
Dairy	697.00	722.00	25.00
Horticulture	2,884.00	3,104.00	220.00
Floriculture	1,979.00	1,979.00	....
Textile, China, etc.	1,488.00	1,575.00	87.00
Graphic and Plastic Arts	662.00	662.00	....
Educational Department	691.00	699.00	8.00
Boys' and Girls' Club Department	1,479.00	3,485.50	2,006.50
Boys' and Girls' Judging Contest	800.00	800.00	....
Team Judging Contest	200.00	225.00	25.00
Spelling Contest	100.00	100.00	....
Baby Health Department	500.00	500.00	....
Horseshoe Pitching Contest		....	300.00
Total	$ 87,198.00	$108,362.50	$ 21,164.50

Secretary Corey suggested that Dean Curtiss confer with the state fair committee at the Iowa State College and ascertain if it would be agreeable to them to move the college exhibit to some other location on the grounds so that the present college building might be used for the exhibits and demonstration work of the Boys and Girls' Club Department. Dean Curtiss said he would have the chairman of the committee come to Des Moines and go over the matter with Mr. Corey.

Plans for selecting the boys for the 1920 Boys' Camp were discussed by the board.

Mr. Corey asked the board what they thought about having the Government Exhibit this year. It was agreed that it was not necessary to have the army and navy exhibit but it would be advisable to provide space for the exhibit put out by the U. S. Department of Agriculture in case it is put on without expense to the fair management.

Mr. Corey asked that the board fix a schedule of admission prices to be charged at the 1920 Iowa State Fair. It was agreed to charge the following prices:

Day Grandstand—Boxes, $1.00; all reserved seats, 75c.
Day Bleachers or Paddock—50c.
Night Grandstand, Paddock or Bleachers—$1.00 for boxes, all reserved seats 75c, paddock or bleachers 50c.
Sunday admission, outside gates—50c.
Sunday auto, admission outside gates—free.
General admission, outside gate up to 6 P. M., 50c; after 6 P. M., 25c.

Mr. Cameron asked what the board would advise with regard to a night show the last Friday of the fair. Mr. Sheldon moved that the matter of the night show for Friday night be left in the hands of the Executive Committee inasmuch as the matter depended largely upon whether they would be able to secure suitable attractions for Friday afternoon and evening. Mr. Reeves seconded the motion. The motion carried.

Mr. Corey called the attention of the board to a motion passed at the December board meeting delegating to the Executive Committee the matter of building a house for the secretary on the fair grounds, and stated that as a member of the Executive Committee he did not care to act upon this matter without knowing the sentiment of the board. After discussing the matter Mr. Curtiss moved with further reference to the matter of building a house on the fair grounds for the secretary that the Executive Committee be authorized to build a house on University Avenue at a location to be selected by the Executive Committee, that will be satisfactory to the secretary and to utilize such second hand material belonging to the state fair as may be available. The motion was seconded by Mr. Sheldon and carried.

Dean Curtiss then moved that all unfinished business pertaining to the plans and conduct of the 1920 fair requiring action previous to the next board meeting be referred to the Executive Committee with power to act. The motion was seconded by Mr. Sheldon and carried.

Mr. Tow moved that the board adjourn subject to the call of the president. The motion was seconded by Mr. Reeves and carried.

EXECUTIVE COMMITTEE MEETING.

February 6, 1920.

The committee met with Members Cameron, Mullen and Corey present.

The committee discussed the matter of employing a Superintendent of Grounds, but no action was taken.

The committee authorized the secretary to rent speed barn "A" to Cyrus E. Harvey for two months for $25 per month. The barn to be used for storing and packing nursery stock.

Plans for a state fair horseshoe pitching contest were formulated by the committee.

The secretary informed the committee that the two checks amounting to $87.85 given in payment of stall rent and feed by N. D. Pike of Weatherford, Oklahoma, were still unpaid.

The committee directed the secretary to have Mr. N. D. Pike suspended by the International Association of Fairs until said checks had been paid.

The committee adjourned to meet in Chicago to attend the meeting of the International Motor Contest Association on February 16, American Trotting Association and Great Western Circuit meeting on February 17, and the meeting of the International Association of Fairs on February 18 and 19.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

Auditorium Hotel, Chicago, Ill., Feb. 15-19, 1920.

Members present: Cameron, Mullen and Cory and Director Curtin.

The committee attended the following meetings in the interest of the Iowa State Fair:

International Motor Contest Association, February 15.
Great Western Circuit Meeting February 16.
American Trotting Association, February 16.
International Association of Fairs and Expositions, February 17-18.

The Iowa State Fair retained membership in the Great Western Circuit and the membership fee to be used in advertising the circuit was fixed at $100.

The Executive Committee held a conference with Mr. I. S. Mahan and John H. Keenan, owners of the roller coaster on the Iowa State Fair Grounds and agreed to a five-year extension of the contract as provided for in the contract with changes in the percentage of the gross receipts to be paid the Iowa State Fair.

The Executive Committee closed the following contracts: Thearle-Duffield Fireworks Company, Chicago, for night show to be put on in front of the grandstand. The spectacle to be known as "The Siege of the Dardanelles," and to be produced seven nights, August 27, 28, 30, 31, and September 1, 2, 3. The consideration to be $10,000.

C. A. Wortham for midway shows to consist of fifteen shows and five rides. The Iowa State Fair to receive 30 per cent of the gross receipts.

F. M. Barnes Inc., Chicago, Illinois, for eleven hippodrome acts for eight days.

Thaviu's Band to consist of forty-five people, including ballet, for seven days for $4,500.

J. Alex Sloan for guaranteeing the appearance of six racing cars and six professional drivers to take part in the auto races August 27 and September 3.

R. A. Hankinson for the appearance of eight racing cars and eight professional drivers to participate in the auto races at the Iowa State Fair, August 27 and September 3.

EXECUTIVE COMMITTEE MEETING.

February 24-25.

Members present: Cameron and Corey.

The Attorney General notified the committee that the appeal from the sheriff's award for Lot No. 2 in the Sims Addition, owned by Matilda A. Winterrowd, had been settled with Clark, Byers and Hutchinson, her attorneys, in accordance with the resolution adopted by the State Board of Agriculture at the meeting on February 5.

The settlement called for the following payments:

Additional amount in payment of land	$1,000.00
Interest from June 16, 1919, to date	658.53
Attorney fees, appellant's attorneys	200.00
Court costs	2.55
Total	$1,861.08

The secretary was authorized to issue a warrant in favor of Clark, Byers and Hutchinson for this amount.

Mr. J. H. Deemer was employed to serve as superintendent of the Iowa State Fair Grounds for one year commencing January 1, 1920, at a salary of $150 per month.

In addition to this compensation the superintendent is to have free house rent, use of farm barns and feed lot, down wood for fuel, free pasture for four cows and the privilege of keeping chickens.

The matter of continuing the boys' camp was discussed by the committee. It was decided that the boys exhibiting calves, pigs, sheep, poultry and the club demonstration teams should constitute the boys' camp. The Shorthorn barn is being converted into a dormitory to be used as camp headquarters. The boys to be furnished cots, mattresses and pillows. For their services as ushers in the grand stand and stock pavilion they are to be paid fifty cents for each performance.

Orders were drawn on the State Auditor for $2,400 for the support of the Department of Agriculture and $1,000 for insurance and improvements to buildings; also the third estimate on the cattle barn amounting to $21,688.

EXECUTIVE COMMITTEE MEETING.

March 9, 10, 11.

Members present: Cameron and Corey and Director Pike.

Mr. Pike and the committee made a careful revision of the premium list for the cattle department, keeping within the amount appropriated by the board on February 5.

The committee and Mr. Pike visited the fair grounds for the purpose of ascertaining progress being made on the cattle barn and to determine on style of stall partitions to be used. The committee decided to use the same design as that used in the International Live Stock show barns, the partitions to be four feet high in front and tapering down to the floor four feet back of the partition to which the cattle are tied.

The hour for releasing live stock and other exhibits was discussed by the committee and the following was decided upon:

All live stock at six p. m. Friday, September 3.

All concessions at twelve o'clock, midnight, Friday, September 3.

All other exhibits at seven a. m. Saturday, September 4.

The committee authorized the superintendent of grounds to purchase new tires for the International Truck.

The committee approved revision of the rules and prices of admission to be published in the premium list.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

April 5, 6, 7, 8.

Members present: Cameron and Corey.

The committee authorized a bid of $300 for the Western Breeders' Futurity; $250 for the trot and $50 for the pace.

The secretary was authorized to take membership in the Horse Association of America at an expense of $5.00.

The committee approved the appointment of L. R. Fairall as director of the Publicity Department at $2,000 per year.

On the recommendation of Mr. H. L. Pike, Superintendent of the Cattle Department, the following classification was adopted for Hereford cattle:

	Offered by Department.	Offered by Hereford Association.	Total.
Open class	$3,500	$3,500	$7,000
Fat Herefords	300	300	600
Amateur class	500	...	500
Calf Club	450	200	650
Total, 1920	$4,750	$4,000	$8,750

The committee approved the purchase of 437 steel frame camp chairs at 75c each from the hut at Fort Des Moines, to be used in the grandstand boxes and the boxes in the Stock Pavilion.

The secretary was authorized to contract for the Mahaffey Orchestra to consist of twelve girls for the sum of $275, the contract to cover seven days of the fair.

The secretary was authorized to secure quotations from the Q. M. Department for 750 single cots and 750 mattresses or bed ticks to be used in the Boys and Girls' Dormitories and for the employes in the Police, Admission, Concession and Treasurer's Departments.

ADVERTISING BUDGET, 1920.

The committee approved the following advertising budget for the 1920 fair:

Country weekly papers	$ 5,000.00
Plate matter for country papers	1,200.00
Daily papers outside Des Moines	1,000.00
Des Moines daily papers	5,500.00
Agricultural, live stock and breed papers	1,750.00
Horse papers, advertising speed program	700.00
Implement and machinery papers	....
Superintendent Advertising, salary, five months	833.00
Assistant salary	100.00
Stenographer and clerk, salary, five months	500.00
Printing Greater Iowa	1,080.00
Postage on Greater Iowa	30.00
Hangers and window cards	775.00
Dates for billboard paper	150.00
Billboard service	1,200.00
Distributing advertising matter	75.00
Cuts and electros	300.00
Co-operative Publicity Bureau, news matter	200.00
Miscellaneous	607.00
	$21,000

ADVERTISING BUDGET SPEED PROGRAM, 1920.

The committee approved the advertising budget for advertising the speed program in the horse papers.

The superintendent of grounds was directed to haul the granite coping along Grand Avenue north of the Capitol Building, the cement curbing along East Eleventh Street and the cement curbing and side walk blocks south of the Capitol Building to the state fair grounds. The granite coping to be used as a retaining wall east of the new cattle barn, the curbing to be used in curbing the new street between the Stock Pavilion and new cattle barn and side walk blocks to be used in extending a new walk from Grand Avenue north to the new auto parking ground.

The proposition submitted by F. Lamson Scribner for putting on an exhibit from the U. S. Department of Agriculture was accepted by the committee. Four thousand feet of floor space at the west end of the show room under the grandstand was set aside for this exhibit. The exhibit to be made without expense to the fair management other than furnishing free space, light, decorations, etc.

An order for $15,000 to cover the fourth estimate on the new cattle barn was drawn on the Auditor of State.

The committee approved the revised plan for the stall partitions in the new cattle barn as submitted by the architects, Keffer and Jones.

The committee held a conference with Mr. G. H. Gendall, Leader Boy Scouts, and entertained a proposition to bring one hundred or one hundred twenty-five boy scouts to the fair this year. The proposition provided that the fair management furnish camping space for the boys, give them free admission and contribute $300 to their mess fund. In return for this the boys are to serve as ushers in the grandstand and coliseum.

The committee directed the superintendent of grounds, Mr. Deemer, to employ the necessary men and teams to fill the new speed barn and also the six nurse cow barns.

The superintendent was also directed to arrange with the Polk County Board of Supervisors to use the grading outfit for grading a new road and cutting a ditch north of the race track and also to level certain portions of the ground in the new auto parking.

The committee and Mr. Fogelsong visited the fair grounds and authorized the planting of trees on the north and south side of the street extending from the street car entrance to Rock Island Avenue; also on the west side of Rock Island Avenue from the south entrance to the walk leading into the Stock Pavilion.

The superintendent was directed to place a foundation under the building to be used as a boys' dormitory; also to put a floor and balcony in this building as directed. Provision also to be made for toilets and shower baths in the room in the basement with opening from the inside; also for a ladies' toilet with an outside door.

The secretary submitted a plan for using the sale ring section of the cattle barn for concession space. The small spaces to be sold to newspaper subscription solicitors and the large spaces to stock remedy and food exhibits.

Mr. A. E. Adams, 1331 Forty-third Street, made the committee a proposition for the grazing privilege on the Iowa State Fair Grounds. He proposed to put on not less than 500 head of sheep and to pay $500 for said privilege for the year 1920, with the understanding that if the arrangement is satisfactory to both parties the same privilege will be granted for 1921; $250 to be paid August 1 and $250 November 15. The sheep to be removed from the lower part of the grounds two weeks prior to the fair. Mr. Adams to have the use of the nurse cow barns for wintering the sheep.

Plans for the dwelling house to be used by the secretary were approved. The house to be located on University Avenue, a short distance north of the Sims house. Contract for building the house was let to A. L. Van Trump. He to receive $10 per day while engaged as carpenter on the work and 5 per cent on the cost of constructing the building for supervision. The percentage not to apply on contract for plumbing and heating or for any material furnished from the fair grounds lumber yard. Mr. Van Trump was directed to proceed with the work at once.

The secretary was directed to ask the Highway Commission to permanently assign two of the Federal trucks for the use of the Iowa State Fair.

The committee approved payment of claims on file.

MEETING STATE BOARD OF AGRICULTURE.

Thursday, April 22, 1920.

President Cameron called an informal meeting of the members of the State Board of Agriculture who were in the city on Thursday, April 22. The meeting was held in Room 912 of the Savery Hotel for the purpose of discussing the advisability of raising the admission at the outside gate from fifty to seventy-five cents.

Members present were: Cameron, Mullen, Corey, Weaver, Curtin, Curtiss and Sheldon.

The secretary presented a statement showing the premiums for this year would call for an expenditure of $30,000 over last year; also a statement showing that the attractions would cost about $8,000 more than last year. He also presented a statement showing the contracts for printing the premium list, catalog and various odd jobs showed an increase of 56 per cent over last year's prices. The matter was thoroughly discussed and Mr. Mullen moved that the following changes in the admission fees be made for the 1920 fair:

Increase admission fee at outside gate from fifty to seventy-five cents.

Increase price of campers' tickets, five coupons, from two dollars to three dollars.

Increase price of exhibitors' ticket, good for the week, from two dollars to three dollars.

Reduce the admission to upper half of the grand stand from seventy-five to fifty cents.

The motion was seconded by Mr. Sheldon and unanimously adopted.

The secretary was instructed to write the absent members of the board asking their approval of this action.

On motion the board adjourned to meet at the call of the president.

EXECUTIVE COMMITTEE MEETING.

April 23-24, 1920.

Members present: Cameron, Mullen and Corey.

Upon recommendation of the florists exhibiting at the state fair, Mr. Arthur H. Smith, Boone, Iowa, was appointed Superintendent of the Floricultural Department.

The committee fixed the salary of Miss Laura Schulze at $125 per month, commencing April 1.

The committee also authorized the secretary to employ a stenographer and clerk to fill the vacancy caused by the resignation of Jeannette Graves at $115 per month.

The committee, with Architect Keffer, visited the fair grounds for the purpose of determining matters pertaining to the construction of the cattle barn. The committee decided to tear down the east end of brick cattle barn No. 2 and require the contractor to put up a new wall in its place. The committee directed the contractor to use the face brick from cattle barn No. 2 in constructing the west front of the new cattle barn. The architect was instructed to cancel the order for the pipe railing specified for top of all stalls in the new cattle barn and to secure proper credit for same on the steel contract.

The superintendent of grounds was authorized to make a contract with John Manbeck for painting the new speed barn two coats, for the sum of $50. Material to be furnished by the owner.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

May 5, 1920.

Members present: Cameron, Mullen and Corey.

The committee approved the contract submitted by the Keenan-Mahan Construction Company for putting up a riding device known as the Old Mill.

The committee visited the grounds and decided to locate the Old Mill on a plot of ground east of the telephone station, the space to be 85 foot front and 265 feet deep.

The committee instructed the Superintendent of Grounds to move the fire station to a point about 100 feet south of the transformer station; also to wreck the old barber shop and move the present post-office to that location. The superintendent was also instructed to wreck the old U. S. Gypsum Company Building.

The secretary was instructed to get in touch with the parties owning the Suffrage Building with a view of purchasing it, same to be used for a post-office.

The Superintendent of grounds was instructed to lay a water and gas line from University Avenue to the new residence on the Sims property.

The secretary was authorized to receive bids and let a contract for hot water, heat and plumbing in the new residence.

The Superintendent of Grounds was directed to do the following painting:

New speed barn.
Outside walls of nurse cow barns.
Woodwork enclosing Grand Ave. and Walnut St. entrances.
Metal roof over both entrances to Grandstand.
Roof of Agricultural Building.
Sides of the dome on Exposition Building.
Expanded metal work in swine pens.
Roof of cattle barn No. 2.

Also spray the infield fence of the race track with mill white.

The Secretary was authorized to let a contract to Potts Brothers for cement walk along the east side of Rock Island Avenue in Block J, floor in fire station and new garage.

The Superintendent of Grounds was directed to put a filling station at the entrance to the Auto Parking Grounds, using the 500-gallon tank on hand and the pump loaned by the Transcontinental Oil Company.

The Secretary was directed to get in touch with the City Engineer and ascertain what steps were to be taken to place the paving foundation on University Avenue in good shape before applying the asphalt finishing coat. He was further authorized that if no steps were to be taken to put this in good shape to ask the Highway Commission to make an inspection of this work and to notify the city that the state would not pay for this pavement unless the foundation is rebuilt or put in first class condition.

Mr. Mullen directed the Superintendent of Grounds to extend the cinder walk from Machinery Avenue to the west fence; also to build another cinder walk from Machinery Avenue to the northwest entrance of Machinery hall about sixty feet south of Grand Avenue.

Mr. Mullen instructed the Secretary to notify the Adel Clay Products Company that it would be necessary for them to clean up their lot just south of the Grand Avenue entrance at an early date; also ask them to submit a plan of the building that they propose to put up this year.

IN VACATION.

May 6, 1920.

The following bids were received for furnishing all necessary labor and material to install plumbing and hot water heating plant in the residence on Sims' estate:

	Heating.	Plumbing.	Total.
Walker Plumbing and Heating Company.....		....	$2,525.00
Van Dyck Heating and Plumbing Company..		....	2,300.00
Des Moines Plumbing and Heating Company.	$1,800	$1,036.00	2,836.00
Sanitary Plumbing Company................	1,520	775.00	2,295.00

As per authority given by the Executive Committee the Secretary awarded the contract to the Sanitary Plumbing Company on their bid of $2,295.

EXECUTIVE COMMITTEE MEETING

May 20, 22, 1920.

Members present: Mullen and Corey.

Mr. Mullen had a conference with the Highway Commission at Ames and requested that two Federal Trucks be permanently assigned to the State of Iowa for the use of the Iowa State Fair.

The committee met with Mr. Wesley Dodd and Earl Stotts of the Dodd & Struthers Company and negotiated for the purchase of their building on the State Fair Grounds. Agreement was reached whereby the committee agreed to pay $1,750 for the building and refund the $250 rental advanced for this year.

Payment of $250 on building and $250 refund was authorized. The balance to be paid on or before September 1.

The committee called upon the Commanding Officers at Camp Dodge for the purpose of securing prices on the following equipment:

800 single iron beds.
800 bed sacks or matts.
30 closets complete with tanks, etc.
2 hot water heaters complete.
24 shower bath heads.

The equipment to be used in fitting up the boys' and girls' dormitory quarters; for men employed in the Admissions Department, Public Safety, Treasurer, Concession and Ticket Auditing Departments.

The committee purchased two hundred Elm trees from the Capital City Nursery Company at the following prices:

2½ to 3-inch Elms, $4.00 each.

Trees to be planted and guaranteed to grow or be replaced.

EXECUTIVE COMMITTEE MEETING.

June 4-5, 1920.

Members present: Cameron, Mullen and Corey.

The Secretary was authorized to purchase the Suffrage Cottage for $100 and to have same remodeled for the Postoffice.

The committee decided to waive the rule in the Pantry and Textile Departments requiring exhibitors to purchase an exhibitor's ticket. In case the exhibitors in these departments enter for less than $10 in prizes it is optional whether they purchase an exhibitor's ticket.

The committee employed Henry Deets at $125.00 per month to serve as Assistant Superintendent of Grounds.

The Secretary was authorized to rent D. V. Whittington the Grandstand, track and adjacent ground for putting on motor cycle races July 5 for the sum of $100; the entertainment to be put on for the benefit of the Firemen's Burial Fund.

The Secretary was directed to employ the Des Moines Legion Band of thirty-six pieces, for Legion Day, at not to exceed $300.00.

The committee conferred with the Superintendent of Grounds relative to work to be done on the grounds.

EXECUTIVE COMMITTEE MEETING.

June 21-24.

The committee spent considerable time at the fair grounds with the Superintendent of Grounds for the purpose of deciding upon certain minor improvements to be made prior to the state fair.

The Superintendent was instructed as follows:

Gravel street from Grand Avenue north to new parking ground; also street running east and west north of race track.

Make only necessary repairs to light lines; this to include replacing about ten poles on Rock Island Avenue and possibly four on Grand Avenue, and straighten out all overhead lines. Employ electricians and purchase material for wiring the new cattle barn in accordance with plans furnished by the architect.

Paint all stationary seats in the Grandstand.

Fill all aisles that are in bad shape in the Swine Pavilion.

Install lights in the new speed barn.

Place about ten street lights on Grand Avenue, Rock Island Avenue, in front of speed barns and near Exposition Building and have same turned on each night by the night watchman.

Construct sanitary sewer back of all concessions in Block J to take care of slops.

Remodel interior of College Building as outlined by Professor Reed, Superintendent of the Boys' and Girls' Club Department; Building to be used for the boys' and girls' club work at this year's fair.

Paint porch floors around Women's and Children's Building.

The Secretary was directed to secure bids for installing toilets and shower baths in basement of the boys' dormitory; also in the cattle barn, providing the equipment can be secured from Camp Dodge.

The Secretary was authorized to purchase 10,000 gallons of road oil to be applied on the streets at the fair grounds the first week in August.

The Secretary was directed to purchase 500 poultry coops for the poultry building, junior poultry department and the rabbit department.

The committee decided to hold the State Horseshoe Pitching Tournament at the paddock in front of the west bleachers, the contest to be put on from 9 to 12 each day.

The Secretary was authorized to employ an engineer for the purpose of laying out street, walk and curbing on the north and east side of the new cattle barn; also to arrange with Potts Brothers for putting in the walk and curbing.

The Secretary was directed to employ Mr. James McKeon, Des Moines, Iowa, as superintendent of the State Horseshoe Pitching Tournament.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

July 6-7-8.

Members present: Cameron, Mullen and Corey.

The committee approved contract with the Wingate Company for decorating all buildings, the consideration to be $1,800.

The committee directed the Superintendent of Grounds to remove all stalls from Horse Barn No. 6 and put same in shape for housing the Junior Poultry Department and the Rabbit Department.

The committee authorized the Secretary to extend the ground contract with the Des Moines Tent and Awning Company for a period of five years.

The Superintendent of Grounds was directed to build six box stalls in nurse cow barn No. 6 to be used as a hospital for sick animals.

The committee arranged with Major Lyman for running the moving pictures produced for the Iowa War Roster Commission on Sunday night, August 29, in the Live Stock Pavilion.

The Secretary was authorized to purchase a hot water heater, an eighty gallon storage tank and lavatories and have same installed in the barber shop.

The committee visited the grounds for the purpose of conferring with the Superintendent regarding improvements and work in progress.

The committee met with E. T. Davis, Superintendent of Public Safety Department, for the purpose of outlining plans for that department.

Mr. Davis was directed to employ thirty-five footmen and fifteen mounted men to police outside fences, camp grounds, streets and Grandstand enclosure. The other Superintendents to employ their own police. The compensation for footmen was fixed at $4.00 per day, mounted men with horses $6.00 per day. Tent or building is to be provided for sleeping quarters; also cots, mattresses and pillows to be furnished all men.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

July 21, 1920.

Members present: Cameron, Mullen and Corey.

The committee authorized the Secretary to employ the Iowa State Fair Orchestra, consisting of seven pieces, for seven days at $500; also the Des Moines Ladies' Orchestra, consisting of seven pieces, for six days for $420; also two vocal soloists to be used with T. Fred Henry's Band at $175.

The Secretary was authorized to purchase one ten thousand gallon tank of road oil at 7¾c per gallon, f. o. b. Ardmore, Oklahoma; also to arrange with John Budd, Superintendent of Streets, for applying the oil.

The committee made a contract with Fred Hethershaw for building the centerpiece in the Agricultural Building. Mr. Hethershaw agreed to give his time from August 2nd to September 10th and to furnish all sheaf grain and forage used in decorating the centerpiece, for the sum of $350.00.

Mr. Hethershaw is to serve as Assistant Superintendent of the Agricultural Building during the period of the fair and to supervise packing and returning all exhibits in the Agricultural Building at the close of the fair.

The committee authorized the Secretary to let a contract for placing the plumbing on the north side of the main entrance to the cattle barn. This to consist of 14 stools, 4 lavatories, two eight foot urinals in the public toilet; also 4 shower bath heads with hot and cold water connections in the shower bath room and 1 stool, 1 shower and 1 lavatory in the room just off from the Superintendent's office, for the sum of $2,310.

The committee met with Mr. Albert, Fish and Game Warden, at the fair grounds and decided to locate the Fish and Game exhibit in Block "I" just north of the space to be occupied by the war exhibit from Camp Dodge.

The committee fixed the salary of Frank Harris at $2,000 per year, commencing August first.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

August 8, 1920.

Members present: Cameron, Mullen and Corey.

The committee met for the purpose of going over the final draft of the daily program. The program was approved by the committee and the Secretary was authorized to publish same in the Official Catalog.

The Secretary was instructed to purchase large thirty inch wood letters, forming the word "cattle," covered with gold leaf for the front of the new cattle barn, at an expense of $84 complete and put in place.

The Superintendent of Grounds was authorized to screen the Boys' Dormitory.

The committee decided upon uniform banners to be placed over the stalls in the new cattle barn; the banners not to exceed three feet in width and twenty-one feet in length.

The Superintendent of Grounds was instructed to string two No. 8 wires above the cattle stalls to carry these banners, the lower wire to be ten feet above the floor and the top wire to be twelve feet, six inches above the floor.

Secretary Corey presented a communication from Dr. Lenna L. Means, Medical Director of the Baby Health Department, relative to an increase in pay for the doctors who serve as judges in that department. The committee instructed Mr. Corey to write Dr. Means, stating the doctors were now being paid the same as officers and directors of the State Board of Agriculture and more than the help in any other department. For that reason the committee did not feel justified in granting the request.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

August 21, September 4, Inclusive, 1920.

The committee held no regular meetings during the period of the fair, but held conferences on all matters demanding attention.

The committee approved payment of contracts and bills during the period of the fair.

MEETING STATE BOARD OF AGRICULTURE.

August 27, 1920.

Dining Room Administration Building.

The board held an informal meeting during the dinner hour, with practically all members present.

On motion of the Secretary, Mr. E. M. Reeves was made director in charge of the Floricultural Department.

Mr. Weaver moved that Dean C. F. Curtiss be directed to attend the funeral of James Wilson at Traer, Iowa, and that he also be instructed to purchase a floral piece for the funeral and have same charged to the Iowa Department of Agriculture.

Motion seconded by Mr. Reeves and carried.

MEETING STATE BOARD OF AGRICULTURE.

September 3, 1920.

Board Room Administration Building.

The following members responded to roll call:

Cameron, Mullen, Corey, Morrow, Weaver, Davis, Reeves, Curtin, Tow, Legoe, Curtiss, Sheldon, Escher, McHenry and Pike.

The Directors and Superintendents of the various departments presented the payrolls for the approval of the board.

Mr. Weaver moved that the payrolls as presented by the officers and superintendents be approved and that the Secretary be authorized and directed to issue an expense warrant covering the amount of each payroll and deposit same with the Central State Bank to the credit of the Superintendent's payroll accounts, and that the various Superintendents be directed to issue payroll checks in payment of the services of employes in their respective departments. Motion seconded by Mr. Curtin and carried.

The members of the board discussed at length the proposition of completing the new cattle barn; this to include the sale ring and window regulators in the main barn. The members expressed a desire to complete the barn at once so that it might be used for the sales this coming winter.

Mr. Pike moved that the Executive Committee be authorized and directed to let a contract for completing the new cattle barn, including the sale ring and window regulators. Seconded by Mr. Escher.

On roll call the following members voted aye: Cameron, Mullen, Corey, Morrow, Weaver, Davis, Reeves, Curtin, Tow, Legoe, Curtiss, Sheldon, Escher, McHenry and Pike.

Those voting nay—none.

Mr. Mullen moved that the Secretary be allowed $50 to cover board and extra expense during the period of the fair. Seconded by McHenry. Motion carried.

Mr. Curtin moved that the board adjourn to meet at the call of the President. Motion seconded and carried.

EXECUTIVE COMMITTEE MEETING.

September 27, 1920.

Members present: Cameron, Mullen and Corey.

The committee met with Mr. J. E. Lovejoy, contractor for the new cattle barn, and Architect Keffer for the purpose of receiving a proposal for the completion of the cattle barn and sale ring.

Mr. Lovejoy submitted the following proposal:

"Des Moines, Iowa, Sept. 20, 1920.

Mr. A. R. Corey, Secy. Iowa State Dept. of Agri.,
Des Moines, Iowa.

Dear Sir:

For the sum of fifteen thousand nine hundred dollars ($15,900) the undersigned will re-include all work omitted and completely finish the new cattle barn and sale ring on the Iowa State Fair and Exposition Grounds as per the plans and specifications prepared by Keffer & Jones, Architects, 204 Masonic Temple, Des Moines, Iowa, with the exception of the plumbing and electric wiring and with the further exception of the cement floor in the Ladies' Toilet and passage from same, the two pipe railings over stalls in the cattle barn proper, for which a credit has already been given. All painting on new steel to be omitted except one coat of red lead, the second coat on steel in the entire building to be omitted, and all toilet stalls, standards, partitions, doors, and hardware for same to be omitted.

Respectfully submitteed,

J. E. Lovejoy."

The committee decided to accept the proposal of Mr. Lovejoy for completing the sale ring and rejected the proposal for installing window regulators. The committee directed the Secretary and Architects Keffer and Jones to reinclude all work omitted to completely finish the sale ring, and cattle barn, with the exception of the window regulators, and add to Mr. Lovejoy's original contract the sum of $15,830.

The committee had a conference with Mr. L. E. Fogelsong, Landscape Architect for the state fair grounds and approved his recommendations. The following is a list of the trees, vines, shrubs and perennials to be planted, with an estimate covering the cost of the shrubs and planting. This expense, however, does not cover the preparation of the beds, etc.:

20 trees planted	$ 40.00
100 vines around bases of buildings	40.00
1,100 shrubs	460.00
1,000 perennials	225.00
Total	$765.00

The Superintendent of Grounds was directed to do such work as is necessary to prepare the beds around the base of the buildings for shrubs as directed by Mr. Fogelsong.

The committee approved payment of claims on file.

EXECUTIVE COMMITTEE MEETING.

October 21-22, 1920.

Members present: Cameron, Mullen and Corey.

The committee, with Architect Keffer, visited the fair grounds for the purpose of checking up the work on the fair grounds. Mr. Keffer was instructed to notify Mr. J. E. Lovejoy, contractor, that the roof on the main cattle barn, laid by Johns-Manville Company would not be accepted until all the leaks had been repaired and the roof put in first class condition as called for by the contract.

Secretary Corey was instructed to purchase one hot water heater and six hot air furnaces for heating the sale ring and offices.

Mr. Lovejoy was also instructed to stain all partitions and woodwork in the offices with golden oak stain in lieu of painting.

The committee decided to make a charge of $2.00 per head for all animals brought into the barns during the sales; also fifty cents per night for the use of the sleeping rooms equipped with cots and mattresses.

The Secretary was instructed to refund for the unused admission tickets returned by a number of manufacturing firms in Des Moines at the close of the fair, out of the unclaimed balance for reserved seat tickets for the Friday night show in front of the grandstand, which was called off on account of rain.

The committee discussed the program for the annual meeting and decided to invite Mr. DeWitt Wing, Editor of The Breeders' Gazette, Chicago, Illinois; Mr. E. T. Meredith, Secretary U. S. Department of Agriculture; L. E. Fogelsong, Landscape Architect, Des Moines, and Dr. Lenna Means, Director Baby Health Department, Des Moines, to address the Convention.

The Secretary was authorized to order 175 delegate badges and 50 guest badges for the joint meeting of the County Fair Managers and the State Agricultural Convention.

AUDITING COMMITTEE MEETING.

October 21-22, 1920.

Members present: Sheldon, Pike and Reeves.

The committee approved payment of all paid bills on file, payment for which had been authorized by the Executive Committee.

MEETING OF THE STATE BOARD OF AGRICULTURE.

December 9, 1920.

The board convened at 9:30 a. m., with President Cameron presiding. The following members responded to roll call: C. E. Cameron, J. P. Mullen, A. R. Corey, W. W. Morrow, H. O. Weaver, E. T. Davis, E. M. Reeves, E. J. Curtin, C. A. Tow, C. F. Curtiss, F. E. Sheldon, Charles Escher, Jr., Sears McHenry and H. L. Pike.

The Secretary read the minutes of the board, executive and special committee meetings commencing with the executive committee meeting February 15-19 at the Auditorium Hotel, Chicago, Illinois, and concluding with the auditing committee meeting October 21-22. On motion of Mr. Pike, seconded by Mr. Escher, the minutes were approved as read.

On motion of Mr. Pike, seconded by Mr. Mullen, the board adjourned sine die.

The board immediately re-convened and Mr. B. W. Garrett, Clerk of the Supreme Court, administered the oath of office to the newly elected officers and members of the State Board of Agriculture: Cameron, Mullen, Davis, Curtin, Sheldon and McHenry.

The following members answered to roll call: Cameron, Mullen, Corey, Morrow, Weaver, Davis, Reeves, Curtin, Tow, Curtiss, Sheldon, Escher, McHenry and Pike.

The next order of business was the election of Secretary and Treasurer. Mr. Reeves moved that A. R. Corey be re-elected Secretary at a salary of $4,000 per year as provided by law and that he be required to give a surety bond of $10,000, the premium amounting to $25 to be paid out of the fair funds. In addition to the salary, he is to be allowed the use of the house on the state fair grounds, and, on account of his automobile being used almost exclusively for state fair work, the expense for gasoline and maintenance is to be taken care of out of state fair funds. On motion, seconded by Mr. Mullen, it was carried unanimously.

Mr. Pike moved that W. W. Morrow of Union County be elected Treasurer for the ensuing year at a salary of $250 per year and traveling expenses as provided by law and that he be required to give a bond of $100,000. Seconded by Mr. McHenry. Motion carried.

Inasmuch as there were no changes in the board of directors the executive committee recommended that the officers and directors act as Superintendents of the following departments:

Public Safety	E. T. Davis, Iowa City
Admissions	F. E. Sheldon, Mount Ayr
Concessions and Privileges	Sears McHenry, Denison
Live Stock Sanitation	Peter Malcom, Des Moines
Horses, Ponies, Mules	Charles F. Curtiss, Ames
Speed	E. J. Curtin, Decorah
Cattle	H. L. Pike, Whiting
Swine	Cyrus A. Tow, Norway
Sheep	Charles Escher, Jr., Botna
Implements and Machinery	J. P. Mullen, Fonda
Agriculture	H. O. Weaver, Wapello
Culinary and Apiary	H. O. Weaver, Wapello
Dairy	W. B. Barney, Des Moines
Horticulture	Elmer M. Reeves, Waverly
Exposition Building, Textile, China, etc.	T. C. Legoe, What Cheer

Dean Curtiss moved that the list of Superintendents as recommended by the executive committee be approved by the board. Seconded by Mr. Weaver. Motion carried.

It was moved by Mr. Weaver that the dates for the 1921 fair be August 24 to September 2 inclusive, and that the hour for releasing live stock exhibits and concessions be the same as outlined in the premium list for the 1920 fair. Seconded by Dean Curtiss. Motion carried.

Mr. W. B. Barney, Superintendent of the Dairy Department, appeared before the board with preliminary plans for a new dairy building for the Iowa State Fair grounds. Mr. Barney stated that the dairy industry was the second largest industry in the state and that several interests were demanding an adequate building for displaying dairy products, and space for exhibiting dairy equipment. He further stated that the plan called for several new features which would bring in considerable revenue and would be interesting features for a building of this kind. These features would include a model creamery fully equipped and in operation during the fair. Also a model ice cream factory which would be operated during the fair and would provide ice cream for the ice cream stand operated by the dairy department and also for the grandstand concession. The matter was further discussed by the board and it was the concensus of opinion that the board should co-operate with the dairy interests of the state in securing an appropriation for the construction of this building.

Mr. F. A. Welch, representing the Department of Public Instruction, and Professor Bender of the Educational Board, appeared before the board and presented a request from the educational interests in the state of Iowa for a suitable building upon the Iowa State Fair grounds to house all educational exhibits. Briefly this was to include the school exhibit put on under the supervision of the Department of Public Instruction, the exhibit of the Iowa State College of Agriculture and Mechanic Arts, the exhibit of the State University of Iowa, the exhibit from the State Teachers College at Cedar Falls, the exhibit of the boys' and girls' club work department and the exhibit from the sixteen institutions under the State Board of Control. The following outline covering the necessity for an adequate educational building on the Iowa State Fair grounds was submitted by Messrs. Welch and Bender:

Necessity for an Adequate Educational Building on the Iowa State Fair Grounds.

I. Present Accommodations:
  1. Inadequate space.
  2. Unfortunate surroundings for exhibits—commercial concessions and distracting counter attractions.
  3. Arrangement and character of rooms very poor.
  4. Light insufficient.
  5 Auditorium accommodations at present offered—crowded and very unsatisfactory because of noise of passing visitors.

II. Provisions needed in new structure:
  1. General school exhibits—
    a. Rural.
    b. Consolidated.
    c. Graded and high schools.
  2. Vocational—
    a. Home making.
    b. Agriculture.
    c. Trades and industries.
    d. Commercial.

NOTE—Boys' and Girls' Club activities in home making and agriculture should have space here.

  3. Health activities of the public schools—
    a. Work and demonstrations of county and city school nurses.
    b. School and community clinics and other demonstrations relating to health.
    c. Sanitation and so forth.
  4. School equipment—
    a. Drawings and models of buildings and grounds.
    b. Furniture.
    c. Systems of building, heating and ventilation.
    d. Teaching apparatus.
    e. Libraries, pictures, and equipment for moral and religious instruction.
    f. Visual instruction apparatus—lanterns, slides, stereoscopes, and stereographs.
  5. Exhibits and demonstrations from state institutions of elementary and secondary rank—
    a. School for blind.
    b. School for deaf.
    c. School for feeble minded.
    d. Industrial schools.
  6. Higher institutions of learning—
    a. Private colleges.
    b. State institutions,
      (1) State University of Iowa.
      (2) Iowa State College.
      (3) Iowa State Teachers' College.

7 Auditorium facilities—
  a. Proper space.
  b. Ease of access.
  c. Remote from noise of passing crowds and vehicles.
  d. Conference rooms.
  e. Facilities for projection work.
8. Location of building—
  a. Removed from undue noise and counter attractions, but somewhat near kindred exhibits.

Mr. Welch also presented the following resolution adopted by the County Superintendents' Section of the Iowa State Teachers' Association:

WHEREAS: The Iowa State Fair and Exposition has recently placed upon the schools of the State and the State Department of Public Instruction the responsibility of preparing and exhibiting the various educational work of Iowa at the Annual State Fair sessions, and

WHEREAS, the present facilities on the Iowa State Fair grounds for properly displaying educational exhibits are both unsuited to and inadequate for a proper display,

THEREFORE, BE IT RESOLVED, that we request the Governing Board of the Iowa State Fair and Exposition and the General Assembly of Iowa to take immediate steps to provide a separate and a suitable building on the Iowa State Fair grounds to properly display and demonstrate the work of our educational institutions, elementary, secondary and collegiate, including all forms of vocational and other special lines of work; and

BE IT FURTHER RESOLVED, that the Iowa State Teachers' Association hereby pledges its undivided support to such a constructive program, to demonstrate the worth of the education of our boys and girls as at least equal to any other line of work being done in Iowa, and that we also pledge our best effort in preparing, exhibiting and demonstrating annually the work of our schools in such building provided for educational purposes.

Edith M. Anderson,
June Chidester,
R. E. Newcomb,
F. A. Welch.

Committee appointed from County Superintendents' Section of Iowa State Teachers' Association.

Dean Curtiss moved that the State Board of Agriculture express its sympathy with the plans outlined by the State Department of Public Instruction for an adequate building to house all educational exhibits. Also that the board provide additional space in the exposition building and under the grandstand for the school exhibits at the 1921 fair and that the Department of Public Instruction and other educational interests of the state be requested to have plans prepared for an educational building on the state fair grounds for consideration and presentation to some future legislature. Seconded by Mr. Weaver. Motion carried.

The Secretary indicated to the board that it would be necessary to announce plans for the state spelling contest and to have the premium list of the educational department printed at an early date. The premium list, as outlined by Mr. Welch, Superintendent of the department, called for $965 and the secretary recommended that the prizes in the spelling contest be increased to $200. Mr. McHenry moved that the recommendation of the Superintendent of the Educational Department and the Secretary be approved and that the Secretary be authorized to have the premium list published at once. Motion seconded by Mr. Weaver and carried.

The Secretary called the board's attention to the recommendations of the Code Commission affecting the laws governing the Department of Agriculture. Mr. McHenry moved that the executive committee and Mr. Weaver be selected as the legislative committee and that all matters pertaining to the revision of the law governing the department, and appropriations asked for by the State Board of Agriculture, be taken care of by this committee. Motion seconded by Dean Curtiss and carried.

The matter of appropriations to be asked of the next General Assembly was discussed by the board. While no action was taken regarding these matters, it was the sense of the board that the Thirty-ninth General Assembly should be asked to reimburse the board in the sum of $55,000, which amount was paid out of the fair funds for the completion of the new cattle barn. It was also the sense of the board that we should cooperate with the Food and Dairy Commissioner and other dairy interests in securing an appropriation sufficient to build a suitable dairy building on the State Fair grounds.

President Cameron called upon the members of the board for any suggestions and also recommendations for their respective departments. Mr. Weaver, Superintendent of the Agriculture Department, stated that there was a committee composed of county agents selected during the fair for the purpose of making recommendations for changes in the class for county exhibits. Mr. Weaver presented the following report of this committee:

REPORT OF COMMITTEE OF COUNTY AGENTS ON COUNTY EXHIBITS.

The committee of County Agents appointed to make recommendations to the State Fair Board have agreed on the following:

1. Pro rate on the basis of $500 to each county entry scoring 600 points or better.

2. Affidavit to be required when the entries are made that all agricultural products shown will have been grown in the county.

3. All sheaves except legumes *shall* be three inches at center. (Judge shall score against "over" as well as "under" size. Variation of one-half inch allowed.)

4 That all sheaf grains and grasses be grown on at least five separate and distinct farms, within the year.

5. Rule ten pertaining to decoration and display revised so that there will be 25 points for best decorated exhibit, considering front and general appearance; 25 points for the most attractive arrangement of products in the exhibit; 25 points for the attractiveness of the products displayed, including neatness of sheaf and blending of colors; 25 points for novel or educational exhibit or display of agricultural products.

6. In the score card it is recommended that three varieties of wheat be required in place of two winter wheat and one spring wheat.

7. In the score card under Division 4, typographical error be corrected to read rye in place of red top.

8. Wherever variety is used it is understood that it is a distinct variety.

9. In Section 5 of score card in place of blue grass, the wording, "blue grass or native grass."

10. In Section 6 in place of two varieties of clover, one variety of clover and one variety of legumes.

11. It is further recommended that all exhibits be in place, as per the rule, by Thursday night and no changes, alterations or additions shall be made thereafter and that the judging be completed by Saturday night, if possible.

12. It is further recommended that the words "in order to be part of exhibit" be inserted after the word "variety" in Rule 5 of Line 9.

13. Management to furnish cards with blank line for variety and name of grower.

14. Everything except of educational value pertaining to agriculture be barred from department.

15. That a Junior Corn Show open to the state be encouraged for boys between the ages of twelve and eighteen years.

Respectfully submitted,
J. F. Coupe,
Dave Wilson,
J. L. Uban,
S. N. McKinsey,
A. L. Bishop.

Mr. Ralph Bolton, secretary of the Greater Des Moines Committee; Col. Guy S. Brewer and L. R. Fairall, appeared before the board in the interests of the Military Department with a view of renting certain barns and buildings on the State Fair grounds for the use of one or two companies of cavalry to be organized under the Iowa National Guard. The committee stated that the government would expect to pay a reasonable rental for the use of the grounds; that they would like the use of at least one of the frame horse barns and the use of the Stock Pavilion for a riding arena. They stated that all the horses would be removed from the barns and placed on picket lines during the period of the fair. Inasmuch as the committee representing the Military Department was unable to state just what rental the government was in a position to pay or what sort of a contract they would enter into for the maintenance of the buildings, the matter was taken under consideration to be taken up at a later meeting of the board.

Mr. Maxwell and Mr. Gardner appeared before the board and presented a request for the use of the horse barns for the purpose of conducting weekly horse sales. They stated that at the present time they were conducting weekly sales at the stock yards, but inasmuch as the yards are now in the hands of the receiver and are not being kept in repair, they desired to remove to a new location. They further stated that the barns would be maintained in the present conditions and that they would be disinfected after each sale and that they would be willing to pay a rental based upon 50c a head for each horse brought into the barns. They stated that during the months of January, February, March and

April, they expected to handle on an average of 250 to 300 a week. No action was taken by the board regarding this matter. Individual members of the board, however, expressed themselves as being opposed to bringing this class of horses into the exhibition barns. The thought was expressed that it would be impossible to keep shipping fever and other diseases from breaking out among the sale stock and that in case any disease broke out among the exhibition horses during the period of the fair, the fair management would be severely criticised for allowing the barns to be occupied with sale stock during the winter months.

EXECUTIVE COMMITTEE MEETING.

December 10, 1920.

Members present: Cameron, Mullen, Corey.

The committee fixed the salary of Joe Smith and Frank Harris at $2,200 per year; also the salary of Georgia Turnbull, clerk in the stallion registration division, at $1,500 a year, commencing January 1, 1921.

The committee approved payment of claims on file.

NUMBER AND KIND OF CERTIFICATES ISSUED AND FEES DEPOSITED JANUARY 1 TO DECEMBER 31, 1920.

Kind of Certificate	No. Issued	Fees	Total Fees
Pure Bred Stallions:			
Original certificates	312	$ 1.00	$ 312.00
Transfer certificates	610	.50	305.00
Renewal certificates	2,241	1.00	2,241.00
Grade Stallions:			----
Original certificates	70	1.00	70.00
Transfer certificates	93	.50	46.50
Renewal certificates	438	1.00	438.00
Pure Bred Jacks:			
Original certificates	169	1.00	169.00
Transfer certificates	203	.50	101.50
Renewal certificates	504	1.00	504.00
Grade Jacks:			
Original certificates	100	1.00	100.00
Transfer certificates	85	.50	42.50
Renewal certificates	254	1.00	254.00
Duplicate certificates	2	.50	1.00
Back fees collected			286.00
Total fees collected Jan. 1, to Dec. 31, 1920			$ 4,870.50
Total fees deposited with treasurer			4,870.50

NUMBER OF STALLIONS AND JACKS ENROLLED BY THE IOWA DEPARTMENT OF AGRICULTURE JANUARY 1 TO DECEMBER 31, 1920.

Counties	American Trotter	Belgian	Clydesdale	Cleveland Bay	French Coach	French Draft	German Coach	Hackney	Morgan	Percheron	Saddle Horse	Shetland Pony	Shire	Suffolk	Thoroughbred	Grade Stallion	Pure Bred Jack	Grade Jack	Total
Adair	---	3	---	1	---	---	---	---	---	14	---	---	6	---	---	3	5	6	38
Adams	---	4	1	---	---	---	---	---	---	10	---	---	1	---	---	6	7	5	34
Allamakee	1	3	---	---	---	---	---	---	---	21	---	---	1	---	---	6	---	1	33
Appanoose	---	1	2	---	---	---	---	---	1	11	---	---	1	---	---	7	10	14	47
Audubon	---	2	7	---	---	1	---	---	---	9	---	---	1	---	---	1	6	-----	27
Benton	---	6	---	---	---	1	---	---	1	17	---	1	---	---	---	8	4	1	39
Black Hawk	4	---	---	---	---	---	---	---	---	8	---	---	---	---	---	6	1	-----	19
Boone	---	23	1	---	---	---	1	---	---	11	---	---	2	---	---	3	19	7	67
Bremer	1	5	1	---	---	2	---	---	2	18	---	---	---	---	---	7	1	3	40
Buchanan	---	12	---	---	---	---	---	---	1	13	---	---	1	---	---	4	8	1	40
Buena Vista	1	4	2	---	---	---	---	---	---	9	---	---	3	---	---	-----	3	1	23
Butler	---	14	1	---	---	1	---	---	---	13	---	---	4	---	---	3	5	3	44
Calhoun	---	7	---	---	---	1	---	---	---	25	---	---	13	---	---	6	10	6	68
Carroll	---	9	---	---	---	2	---	---	---	24	1	---	5	1	---	3	15	3	63
Cass	---	4	1	---	---	1	---	---	---	16	---	---	2	---	---	5	8	6	43
Cedar	---	1	---	---	---	2	---	---	---	10	---	---	1	---	---	2	5	3	24
Cerro Gordo	1	7	---	---	---	1	---	---	---	13	---	---	1	---	---	8	3	-----	34
Cherokee	---	1	---	---	---	1	---	---	---	10	---	---	---	---	---	1	5	2	20
Chickasaw	1	5	---	---	---	2	---	---	---	30	---	---	4	---	---	5	17	-----	64
Clarke	---	3	---	---	---	3	---	---	---	15	---	1	---	---	---	7	8	2	39
Clay	1	3	2	---	---	---	---	---	---	12	---	---	1	---	---	12	4	2	37
Clayton	1	11	1	---	---	---	---	---	---	26	---	---	3	---	---	14	4	2	62
Clinton	---	4	---	---	---	2	---	---	---	8	---	---	---	1	---	9	1	1	26
Crawford	---	4	2	---	---	---	---	---	---	16	---	---	---	1	---	8	13	-----	44
Dallas	2	10	1	---	---	3	---	---	---	19	3	---	3	---	---	2	8	1	52
Davis	---	---	2	---	---	3	---	---	---	12	1	---	---	---	---	4	3	3	28
Decatur	---	3	---	---	---	1	---	---	---	16	---	---	2	---	---	10	10	13	55
Delaware	1	17	1	---	---	---	---	---	---	14	---	---	1	---	---	4	3	1	42
Des Moines	---	---	---	---	---	---	1	---	---	3	---	---	---	1	---	1	1	1	8
Dickinson	---	4	---	---	---	2	---	---	---	14	---	---	3	---	---	2	6	4	35
Dubuque	---	4	---	---	---	2	---	---	---	6	---	---	---	---	---	7	1	1	21
Emmet	---	4	1	---	---	2	---	---	---	8	---	---	2	---	---	3	2	4	26
Fayette	3	5	---	---	---	1	---	---	---	17	---	---	2	---	---	6	4	1	39
Floyd	---	3	---	---	---	---	---	---	---	14	---	---	---	---	---	6	3	-----	26
Franklin	---	3	1	---	---	3	---	---	---	12	---	---	2	---	---	2	3	3	29
Fremont	---	2	---	---	---	1	1	---	---	15	1	---	1	---	---	7	13	5	46
Greene	---	11	---	---	---	2	---	---	---	18	1	---	3	---	---	4	10	2	51
Grundy	---	2	---	---	---	---	1	---	---	5	---	---	---	---	---	4	1	-----	13
Guthrie	---	7	1	---	---	3	---	---	1	17	---	1	4	---	---	5	13	5	57
Hamilton	---	7	1	---	---	2	---	---	---	16	---	---	2	---	---	3	6	2	39
Hancock	---	7	---	---	---	---	---	---	---	21	---	---	1	---	---	7	3	1	40
Hardin	1	2	---	---	---	1	---	---	---	28	---	---	---	---	---	11	8	4	55
Harrison	1	4	1	---	---	---	---	---	---	11	---	---	5	---	---	8	15	8	53
Henry	---	2	---	---	---	---	---	---	---	17	---	---	---	---	---	2	6	4	31
Howard	---	6	4	---	---	3	---	---	---	10	---	---	1	---	---	7	6	1	38
Humboldt	1	9	---	---	---	2	---	---	---	11	---	---	3	---	---	4	2	2	34
Ida	---	4	---	---	---	1	---	---	---	12	---	---	---	---	---	-----	3	1	21
Iowa	---	1	2	---	---	1	---	---	---	6	---	---	1	---	---	2	6	3	22
Jackson	---	15	---	---	---	2	---	---	---	12	---	---	3	---	---	11	4	1	48
Jasper	1	4	4	---	---	1	---	---	---	15	---	1	---	---	---	3	8	4	41
Jefferson	---	6	---	---	---	3	---	---	---	12	---	---	---	---	---	2	10	3	36
Johnson	3	3	1	---	---	3	---	---	---	23	---	---	2	---	---	8	4	4	51
Jones	2	2	5	---	---	---	---	---	---	20	---	---	1	---	---	1	5	2	38
Keokuk	1	2	2	---	---	7	---	---	---	65	---	---	1	---	---	12	18	5	113
Kossuth	---	6	4	---	---	2	1	---	---	20	---	1	3	---	---	8	2	5	52
Lee	---	---	---	---	---	2	---	---	---	10	---	---	---	---	---	6	6	6	30
Linn	1	11	---	---	---	5	---	---	---	24	1	1	1	---	---	9	41	2	96
Louisa	1	3	---	---	---	---	---	---	---	10	---	---	2	---	---	3	5	1	25
Lucas	---	3	---	---	---	1	---	---	---	12	---	---	1	---	---	5	5	10	37
Lyon	---	3	---	---	---	---	---	---	---	14	---	---	---	---	---	1	3	1	22
Madison	1	8	---	---	---	2	---	---	---	10	---	---	4	---	---	2	8	5	40
Mahaska	2	4	---	---	---	---	---	---	---	14	---	1	---	---	---	2	4	4	31
Marion	---	3	1	---	---	2	---	---	---	19	---	---	1	---	---	5	17	7	55
Marshall	2	2	4	---	---	3	---	---	---	18	---	1	1	---	---	1	8	3	43
Mills	---	---	---	---	---	1	---	---	---	10	---	---	4	---	---	3	2	5	25
Mitchell	---	6	2	---	---	---	---	---	---	11	---	---	1	---	---	3	---	-----	23

NUMBER OF STALLIONS AND JACKS ENROLLED BY THE IOWA DEPARTMENT OF AGRICULTURE JANUARY 1 TO DECEMBER 31, 1920.

Counties	American Trotter	Belgian	Clydesdale	Cleveland Bay	French Coach	French Draft	German Coach	Hackney	Morgan	Percheron	Saddle Horse	Shetland Pony	Shire	Suffolk	Thoroughbred	Grade Stallion	Pure Bred Jack	Grade Jack	Total
Monona	---	1	---	---	---	1	1	---	---	11	---	---	1	---	---	8	5	7	35
Monroe	1	---	---	---	---	1	---	---	---	8	---	---	2	---	---	5	5	1	23
Montgomery	---	3	---	---	---	---	1	---	---	13	---	---	4	---	---	1	8	5	35
Muscatine	---	2	---	---	---	4	---	---	---	11	1	---	---	---	---	5	3	1	27
O'Brien	---	15	1	---	---	4	---	---	---	15	---	---	3	---	---	4	2	1	45
Osceola	---	4	---	---	---	1	---	---	---	5	---	---	1	---	---	-----	1	-----	12
Page	---	7	---	---	---	2	---	---	---	15	1	---	5	---	---	5	8	17	60
Palo Alto	---	6	---	---	---	---	1	---	---	12	---	---	1	---	---	12	6	3	41
Plymouth	---	6	---	---	---	---	---	---	---	10	---	---	1	---	---	3	2	2	24
Pocahontas	---	4	---	---	---	1	---	---	1	26	---	---	3	---	---	7	9	1	52
Polk	---	14	---	---	---	3	---	---	---	21	---	---	11	---	---	1	7	3	60
Pottawattamie	---	7	3	---	---	1	---	---	---	19	---	1	2	---	---	10	4	12	59
Poweshiek	---	6	2	---	---	4	---	---	---	11	---	---	4	---	---	7	13	4	51
Ringgold	---	6	---	---	---	4	---	---	---	15	---	---	3	---	---	7	16	10	61
Sac	1	3	2	---	---	2	---	---	---	26	1	1	2	---	---	2	7	2	49
Scott	---	---	2	---	---	---	---	---	---	10	---	---	1	---	---	2	2	2	19
Shelby	---	5	2	---	---	1	---	---	---	12	---	---	1	---	---	4	8	5	38
Sioux	2	1	1	---	---	---	---	---	---	11	---	---	---	---	---	2	2	-----	19
Story	---	6	3	---	---	5	---	---	---	32	---	---	5	---	---	6	8	2	67
Tama	---	4	1	---	---	1	---	---	---	27	---	---	1	---	---	8	6	5	53
Taylor	---	6	2	---	---	1	1	---	---	21	1	---	1	---	---	8	7	13	61
Union	---	6	---	---	---	5	---	---	---	25	---	---	4	---	---	8	16	9	73
Van Buren	---	2	1	---	---	1	---	---	---	14	---	---	---	---	---	-----	7	2	27
Wapello	---	3	1	---	---	2	---	---	---	9	1	---	---	---	---	4	6	5	31
Warren	---	1	1	---	---	2	---	---	---	18	---	---	2	---	---	8	10	12	54
Washington	---	5	---	---	---	3	---	---	---	22	3	---	---	1	---	2	8	4	48
Wayne	---	3	1	---	---	3	---	1	---	15	1	---	---	---	---	6	12	5	47
Webster	1	7	1	---	---	2	---	---	---	14	---	---	6	---	---	3	4	4	42
Winnebago	---	3	2	---	---	3	---	---	---	15	---	---	---	---	---	7	5	-----	35
Winneshiek	---	8	2	---	---	5	---	---	---	13	---	---	1	---	---	9	3	2	43
Woodbury	---	5	---	---	---	6	---	---	1	11	---	---	1	---	---	3	5	3	35
Worth	---	2	---	---	---	1	---	---	---	6	---	---	2	---	---	3	---	-----	14
Wright	---	1	---	---	---	2	---	---	---	16	---	---	---	---	---	5	7	5	36
Adjoining states	2	5	---	---	---	---	1	---	---	14	---	---	---	---	---	2	2	-----	26
Total 1920	41	491	87	1	---	158	10	1	8	1,523	17	10	179	5	---	497	662	354	4,044
Total 1919	72	531	123	1	3	214	14	3	10	1,779	15	13	218	5	1	725	645	348	4,720
Total 1918	140	665	222	1	3	355	24	3	16	2,455	17	30	311	5	1	1,203	606	439	6,486
Total 1917	293	805	258	1	5	434	33	11	30	2,877	36	32	418	7	4	1,731	512	466	7,953
Total 1916	421	866	291	1	10	483	50	14	43	3,249	32	49	455	10	6	2,150	430	496	9,056
Total 1915	592	9[illegible]4	309	3	12	508	58	17	54	3,347	30	56	515	10	7	2,489	357	549	9,817
Total 1914	624	944	332	2	18	516	54	18	55	3,185	28	53	523	9	6	2,686	233	589	9,875
Total 1913	641	863	327	2	22	503	58	17	62	2,864	27	43	504	10	7	2,592	103	578	9,225
Total 1912	689	766	32[illegible]	1	27	464	72	16	53	2,716	23	33	485	5	8	2,449	52	5[illegible]9	8,689
Total Pure Bred Stallions Licensed 1920																		2,531	----
Total Grade Stallions Licensed 1920																		497	3,028
Total Pure Bred Jacks Licensed 1920																		662	----
Total Grade Jacks Licensed 1920																		354	1,016
Grand total																			4,044

IN MEMORIAM
JAMES WILSON

The pioneer period of Iowa produced men of originality and unusual strength of character. One of the outstanding figures of that generation was James Wilson, of Traer. Born in Ayrshire, Scotland, in 1833, he came with his parents to Norwich, Connecticut, in 1851, and to Traer, Iowa, in 1855. He was the oldest of fourteen children, all of whom came to maturity, and there are now about a hundred descendants of the family living in Iowa.

In 1861, he established the farm adjoining the parental homestead. This eventually included twelve hundred acres which was retained until it was divided among his six surviving children during the later years of his life.

He was educated in the parish schools of Scotland, the public schools of Norwich, Connecticut, and Iowa College, at Grinnell. He left Iowa College in his junior year in order to help other members of the family who were then of college age. While in college, he walked home, forty-five miles, to vote.

In 1862, he married Esther Wilbur, of Traer. He was instrumental in establishing the Tranquility Presbyterian Church on the Wilson farm, and gave it his loyal support throughout his life.

He early displayed qualities of leadership and service. He was elected to the Iowa House of Representatives in 1868-1873, and was Speaker of the House in 1872-1873. He was a member of the National House of Representatives in 1873-1877, and again in 1883-1885. He served as a member of the Iowa State Railway Commission in 1879-1883. He was a regent of the State University of Iowa from 1870-1874, and a Trustee of Coe College from 1885-1891.

From 1891 to 1897 he served as Professor of Agriculture and Director of the Agricultural Experiment Station of the Iowa State College. He was Secretary of Agriculture from 1897-1913 in the cabinets of Presidents McKinley, Roosevelt and Taft.

It seldom falls to the lot of any man to serve his home community, his state, and nation, in such a signal manner and with such eminent distinction and success as is found in the life of James Wilson. Through all the stress of his varied public life, his loyalty to his home friends, and devotion to the Tranquility Country Church were constant, and likewise his friendships with associates and students, formed during his service at the Iowa State College, were marked by the same genuineness and devotion that was manifest in all of his great work. In all of his official life, whether state, educational, or national, he was extremely loyal to the administration of which he was a part. No one ever questioned his fidelity.

He had a directness, brevity and force of expression that was laconic. His writings were widely read. His official reports were classic in their line.

He had a master mind for construction, organization, and administration, but he never overlooked details, nor forgot old associations. He possessed the rare faculty of inspiring men associated with him, and under him, to do their best work. He not only gave all that he had in his rare personality, his great heart and intellect, but he brought out the best in others. It is only a great man that can do this. His influence was never repressive. It was always constructive and inspiring. He did not meddle in the duties assigned to helpers. On the contrary, he trusted them and looked confidently to them for results. His work was strengthened and made more potent by deep religious conviction.

He possessed a wonderful faculty of intense application and mastery of any work that he undertook. When, as a young farmer, he was elected to the Iowa legislature, he determined to understand the principles and practice of parliamentary law. He studied every standard work on the subject, by the farm fireside at night, and in the fields during the day, and he took rank as a parliamentarian, not only on the floor and in the speaker's chair in the Iowa House of Representatives, but he ranked among the leaders in the National House, and he became the parliamentary adviser of James G. Blaine, who was then speaker.

The same characteristic of intense application and mastery was again manifest when he came to the Iowa State College rather late in life to take up a work that was entirely new to him. This work was undertaken in response to the feeling of dissatisfaction on the part of the agricultural interests with the status of the agricultural work at the institution at that time. There were practically no students studying agriculture, and no agricultural work was being given that was worthy of Iowa's great industry. This situation was quickly changed. He brought to bear his keen insight, his broad vision and trained mind, and he attacked problems of agricultural research and education with all of the application, thoroughness, and zeal, worthy of one of years of service in this special field.

He not only mastered the problem of putting agricultural instruction and investigation on a sound basis where it took its proper rank, but, in doing so, obtained the best kind of experience and training for the work which he conducted with such commanding skill and ability when he entered President McKinley's cabinet as Secretary of Agriculture, and continued to serve through four consecutive terms under three presidents.

His work at the head of the national department of agriculture will stand as a monument for all time to come. A member of the United States Senate has well said: "Alexander Hamilton made the Treasury Department, and James Wilson made the Agricultural Department."

PART II

Agricultural Rooms, State House

WEDNESDAY, DECEMBER 8, 1920.

The president (Mr. C. E. Cameron) called the meeting to order at 10 a. m.

The vice president (Mr. J. P. Mullen), taking the chair, announced the next topic on the program would be the address of the president, Mr. C. E. Cameron.

Gentlemen of the Convention:

We are again assembled in annual convention under Section 1657-d. I wish to briefly refer to some matters, directly or indirectly pertaining to the welfare of the Society, trusting it may not be wholly devoid of interest to you.

Glancing backward over the lapse of time since our last annual meeting, we cannot refrain from asserting our conviction that it has been a remarkable year. A year ago everything looked bright for the future, and the future was bright up to the time of harvesting one of the largest crops Iowa has ever raised. All the fairs, not only Iowa but all the other states, reported record-breaking attendance. But since the closing of the fair season, and at the commencement of marketing our crops, prices for farm products commenced to fall, and today farmers are not realizing, in some cases, what rent they have to pay for the land.

To my mind, conditions will have to change. Grain rents will have to be substituted for cash rent, and the landlord will then share equally with the tenant in the fat and lean years. I know of farms that are now rented for from $15 to $20 per acre, and the crops will not pay the rent. If the landlord should throw off $5 or $10 an acre this year, and next year the tenant should have a good crop and prices would be higher, he would not be willing to reimburse the landlord for what he did for him this year. And that is the reason I think grain rental is the best, taken one year with another, and the renter would not be forced to sell his crop to pay the cash rent as a great many of them have to do.

We all agree that we have been going a fast clip for the last two or three years and that we did not realize conditions would change so suddenly. In fact, we all have more or less anticipated the receipts of our promising crops of 1920, and did not expect them to go below the cost of production. And that is what they have done.

Speaking of the 1920 State Fair, while our attendance fell a little short of the 1919 Fair, there were several reasons for that. During the first three or four days of the Fair, while it did not rain here, it rained all around Des Moines and prevented the people from coming in their autos. The threatened strike of the city street car men, in my mind, kept a great many people away, for they were afraid to come, even in their autos, for fear of congestion of cars in and out of the grounds.

But from a financial and an exhibit standpoint, the Fair stands out preeminently as the most successful fair ever held, as you will see by the Secretary's report. Our new cattle barn, the largest of its kind ever constructed on a fair ground, was certainly appreciated by the cattle men, and the public generally, as they could see all the cattle under one roof.

There are some other improvements that should be made to complete the housing of the exhibits that are annually increasing. A Dairy Building, a Floral Building, enlargement of the grandstand—these especially should be taken under consideration for the improvements of 1921.

There is a matter I want to call your attention to that will come up at the next regular session of Congress, and that is the Revenue Tax on our grand stand for the night show. The revenue officers have, in a great many cases, collected for this, but others have refused to pay it, and there the matter stands. The revenue officers in different sections of the country have different ideas of this tax. To my mind, we should not pay this tax. While the entertainment at night is different from that of the afternoon, the final object is the same—that is, to raise revenue to carry on the work the Government has been asking us to do for the last three or four years—increase the production—and that is what we have been doing with the night show receipts, increasing our premiums all along the line with this end in view.

Last week in Chicago at the annual meeting of the state and other fairs, this matter of the tax was taken up, and a committee will be sent to Washington to confer with the "powers that be" to have this matter adjusted, and no doubt you will be called upon to write your congressman and senator to favor the elimination of the tax, not only on state but upon all county and district fairs. When you receive this letter, do not put it off, but write them a good stiff letter.

Regarding the coming 1921 fairs, I hardly know what to say to you in regard to what the outcome will be. Everything seems to be on the retrench order, and I suppose the fairs will have to follow along the line of public sentiment. There are a great many ways that the fairs can reduce their running expenses without the public knowing it. I would put up a bold front and tell the public the fair will be up to the standard of former years, and, in fact, ahead. The people of the community where the fair is held, as a rule, are loyal to the fair. Tell them this is the year that you need their hearty cooperation with their exhibits and attendance.

I want to express a word of encouragement to the fair men of the state, who have always been hard workers and loyal boosters for everything that pertains to the development of all the industries that have made Iowa great.

The President: I have two committees to appoint. The first is the committee on credentials and I will appoint on this committee, H. L. Pike of Harrison County, R. W. Scholfield of Hardin County, F. M. Griffin of Calhoun County. For the resolutions committee, I will appoint H. O. Weaver of Louisa County, R. J. Shanahan of Story County, and George White of Mills County.

The next subject on the program is the report of the secretary.

REPORT OF SECRETARY

A. R. COREY.

Following the custom adopted for the past few years, I am submitting herewith a printed report covering the activities of the Iowa Department of Agriculture and the Iowa State Fair for the year ending November 30, 1920.

This report deals primarily with the Iowa State Fair and the county and district fairs held during the past year. A complete report covering the proceedings of the State Board of Agriculture and work performed by the Department of Agriculture will be presented in the Iowa Year Book of Agriculture, and a supplement containing a report of the stallion registration division.

In brief, the statute provides that the State Board of Agriculture shall conduct the annual state fair and that the officers and directors shall constitute the board of managers for the fair. The statute also provides that the Department of Agriculture shall collect the farm and crop statistics annually through the township assessors and county auditors, tabulate and publish same in the Year Book of Agriculture. The Department also receives and audits the reports of the county and district fairs, farmers' institutes and short courses, certifies the correct reports to the Auditor of State and remits the state aid due these organizations.

The Department has also maintained for a number of years a publicity bureau at the expense of the State Fair. During the period from May to October first the activities of this bureau deal primarily with the state fair, and the balance of the year with subjects along agricultural and live stock lines. The matter is disseminated through the department publication "Greater Iowa" and news bulletins.

The stallion registration division, which will be covered more completely in the supplement published later, enrolls all stallions and jacks offered for public service, sale, exchange or transfer in the State of Iowa. During the period from January 1, 1920 to November 1, 1920, the department enrolled and issued certificates for 2,529 pure-bred and 500 grade stallions, 664 pure-bred and 341 grade jacks. The certificates issued show a decrease of 428 pure-bred and 222 grade stallions and an increase of 23 pure-bred and a decrease of 6 grade jacks. There was a total decrease of 750 stallions enrolled during the year 1920 against a total decrease of 1,732 during the year 1919. The enrollment of jacks during 1920 showed an increase of 17 against a decrease of 49 during 1919. The records show that 83 per cent of the stallions and 66 per cent of the jacks offered for public service in the State of Iowa are of pure breeding.

The following tabulation shows the number and kind of certificates issued, the fees collected and the amount deposited with the treasurer:

Kind of Certificates Issued	No. Issued	Fees	Total Fees
Pure Bred Stallions:			
Original certificates	307	$1.00	$ 307.00
Transfer certificates	584	.50	292.00
Renewal certificates	2,222	1.00	2,222.00
Grade Stallions:			
Original certificates	63	1.00	63.00
Transfer certificates	91	.50	45.50
Renewal certificates	437	1.00	437.00
Pure Bred Jacks:			
Original certificates	167	1.00	167.00
Transfer certificates	185	.50	92.50
Renewal certificates	497	1.00	497.00
Grade Jacks:			
Original certificates	90	1.00	90.00
Transfer certificates	80	.50	40.00
Renewal certificates	251	1.00	251.00
Duplicate certificates issued	2	.50	1.00
Back fees collected	255	1.00	255.00
			$4,761.00
Deposited with treasurer			$4,761.00

COUNTY AND DISTRICT FAIRS

County and district fairs throughout Iowa experienced the most successful year in their history during 1920. Ninety-four fairs were held during the year. That these fairs are constantly gaining ground and are receiving stronger support each year is indicated in the reports made to the Department of Agriculture.

State aid paid during 1920 amounts to $113,013.04. This was an increase of $22,504.54 over the amount paid in 1919.

With the bettering of the financial condition of most of these fairs, there also came a record of marked increases in the exhibits entered in practically all departments. Swine exhibits showed 31,565 during 1920 as compared to 19,815 during 1919. The horse department, which had fallen as low as 3,911 entries in 1918, has a record list of 5,000 during 1920. This same trend toward greater interest on the part of farmers and stock raisers was reflected generally in the entries for all departments during the year just closed.

Attendance totals ran slightly higher than for 1919. The total attendance at all county and district fairs during the season was 1,795,783, about 200,000 more than the previous year.

Total receipts for these fairs were $2,229,024.33. This is an increase of $878,282.67 over the previous year. Receipts at the outside gates brought $699,434.80, about $130,000 more than in 1919, and the grand stand receipts were likewise nearly $100,000 more than the previous season.

Entry fees in the speed departments brought in $38,610.63, concession privileges $157,483.50, advertising in programs and premium lists $37,186.51, and miscellaneous receipts $143,224.76.

While attendance and profits grew during the year, the cost of holding these fairs showed a material increase. The total expense of all fairs was $1,215,161.47, nearly $400,000 more than 1919. Music and attractions were the greatest single items of expense, costing a total of $328,703.97. Speed premiums amounted to $218,592.11, premiums other than speed $243,702.97, and miscellaneous expenses $424,032.41.

Seventy-seven fairs showed a profit of $219,922.31 during the year and seventeen recorded a loss of $17,479.32. The ninety-five fairs thus showed a net profit of $202,442.99.

The fact that state aid is a great factor in keeping many of these fairs going and that it has helped a number of them to ultimate financial independence, can be seen from the figures quoted here. If this fund were not available the big work which these county and district fairs are doing in these communities would not be able to go on.

The tables which follow give detailed information for individual fairs.

Table No. 1 shows the receipts and expenses of the fairs for the year 1920 and also shows profit and loss. This table does not take into consideration balances on hand at the beginning or close of the season, or any expenditures for repairs, improvements, etc.

Table No. 2 is a financial statement of all fairs and shows the total receipts and disbursements from all sources and the balance on hand or overdraft. The present value of the grounds and buildings is set out in one column and the present indebtedness in another.

Table No. 3 shows the number of exhibitors at each fair and the number of horses, cattle, swine, sheep and poultry on exhibition and the amount paid in premiums in each division.

Table No. 4 sets out the total attendance, total number of paid admissions at outside gates and day and night grandstand; also the admission fees charged at the outside gates and grandstand.

Each of the four tables carries, for purposes of comparison, the totals for the years 1915, 1916, 1917, 1918 and 1919.

NO. 1—RECEIPTS AND DISBURSEMENTS

Number	County, City or Town	Receipts					
		Ticket Sales		Entry fees speed department	Concessions and privileges	Advertising in premium list and program	Miscellaneous receipts of fair
		Outside gate	Grand stand				
1	Adair, Greenfield	$ 5,107.40	$ 544.02	$ 70.00	$ 762.39	$ 101.60	$ 151.35
2	Adams, Corning	2,997.75	461.70	49.25	505.40	----------	118.50
3	Allamakee, Waukon	5,230.83	267.13	----------	828.59	----------	80.50
4	Audubon, Audubon	7,420.80	1,281.05	130.00	1,032.29	----------	486.51
5	Benton, Vinton	9,623.94	1,852.30	375.00	2,118.56	----------	1,613.85
6	Black Hawk, Cedar Falls	10,101.25	5,299.65	270.00	2,329.00	1,093.00	2,747.74
7	Black Hawk, Waterloo	20,413.95	10,410.69	----------	1,722.50	1,922.00	16,501.98
8	Boone, Ogden	3,836.80	512.30	240.00	1,255.00	127.60	1,208.98
9	Bremer, Waverly	8,106.20	2,130.75	257.00	2,682.58	1,203.05	3,658.49
10	Buchanan, Aurora	1,463.75	----------	9.30	110.00	479.00	784.00
11	Buchanan, Jesup	4,162.75	----------	----------	1,045.66	----------	867.00
12	Buchanan, Independence	8,226.39	941.70	----------	1,156.61	673.85	1,454.00
13	Buena Vista, Alta	6,908.40	359.25	335.00	1,715.95	----------	1,284.24
14	Butler, Allison	4,742.64	863.70	200.00	950.00	363.90	236.50
15	Calhoun, Manson	3,843.50	844.75	71.25	1,474.90	----------	504.27
16	Calhoun, Rockwell City	5,301.50	1,143.30	1,164.00	1,602.50	----------	1,338.00
17	Carroll, Carroll	4,244.50	394.15	620.00	1,058.09	577.00	326.52
18	Cass, Atlantic	11,553.75	2,445.75	27.00	1,985.90	249.00	3,586.03
19	Cass, Massena	2,636.75	135.61	52.50	607.76	----------	304.50
20	Cedar, Tipton	6,736.75	1,529.90	435.00	1,198.77	218.50	2,453.48
21	Cerro Gordo, Mason City	10,196.70	3,516.12	510.00	5,351.11	1,530.03	1,956.64
22	Chickasaw, Nashua	5,314.00	1,360.45	----------	704.00	----------	282.31
23	Clay, Spencer	18,888.10	3,793.60	1,180.00	3,184.60	1,439.50	804.00
24	Clayton, National	3,781.80	242.75	----------	281.50	275.00	257.25
25	Clayton, Elkader	3,414.75	474.75	90.00	498.20	460.00	3,989.60
26	Clayton, Strawberry Point	3,379.90	795.22	40.00	475.50	374.00	292.60
27	Clinton, DeWitt	6,964.51	1,306.95	604.13	1,767.00	889.00	1,367.43
28	Crawford, Arion	4,310.25	224.00	----------	495.00	----------	189.46
29	Dallas, Perry	6,012.00	1,533.25	345.00	428.41	65.28	603.50
30	Davis, Bloomfield	8,740.00	3,558.50	821.00	1,087.00	402.00	1,025.93
31	Decatur, Leon	9,199.31	4,607.10	529.00	933.13	781.00	437.25
32	Delaware, Manchester	9,405.64	1,706.65	170.00	2,379.46	1,400.00	2,043.66
33	Des Moines, Burlington	15,951.00	12,198.14	1,320.00	3,640.50	516.00	4,395.79
34	Fayette, West Union	11,689.15	1,837.45	232.50	3,402.60	----------	535.25
35	Fremont, Hamburg	4,943.67	693.50	----------	494.00	----------	285.50
36	Greene, Jefferson	5,626.75	2,507.75	----------	843.05	529.00	633.95
37	Grundy, Grundy Center	3,461.80	150.00	----------	310.25	----------	1,090.05
38	Guthrie, Guthrie Center	4,935.95	----------	----------	922.00	----------	802.50
39	Hamilton, Webster City	4,201.93	----------	----------	916.00	1,123.00	601.00
40	Hancock, Britt	6,177.33	1,424.35	369.00	1,440.03	----------	1,617.50
41	Hardin, Eldora	7,498.72	2,029.70	351.50	847.75	----------	1,041.27
42	Harrison, Missouri Valley	5,902.73	1,097.70	----------	1,332.91	----------	----------
43	Henry, Mt. Pleasant	10,802.00	6,607.00	3,433.50	4,269.25	----------	2,970.47
44	Henry, Winfield	3,180.65	1,095.50	631.25	647.00	----------	809.20
45	Humboldt, Humboldt	6,694.62	1,487.95	145.00	1,206.00	324.25	84.50
46	Ida, Ida Grove	----------	----------	----------	246.00	126.75	1,798.00
47	Jackson, Maquoketa	8,052.14	1,609.20	469.45	987.75	495.00	243.00
48	Jasper, Newton	8,387.00	2,252.75	715.00	1,688.00	344.00	1,575.28
49	Jefferson, Fairfield	6,384.57	1,832.26	862.50	2,021.50	469.50	2,854.28
50	Jones, Monticello	6,671.10	1,809.75	262.50	1,448.45	883.50	856.40
51	Jones, Anamosa	3,651.15	1,325.65	520.00	596.00	410.00	7,608.90
52	Keokuk, What Cheer	4,752.25	1,440.75	----------	712.00	----------	205.06
53	Kossuth, Algona	14,006.57	1,597.25	539.00	2,536.10	----------	1,438.09
54	Lee, Donnellson	2,802.65	----------	140.00	368.50	741.50	223.85
55	Lee, West Point	2,677.79	394.00	620.00	650.06	760.50	837.85
56	Linn, Central City	4,091.90	2,612.30	65.00	855.20	561.00	1,066.50
57	Linn, Marion	3,844.89	1,800.00	510.00	619.00	200.00	1,300.60
58	Louisa, Columbus Junction	5,724.00	1,349.25	600.00	1,039.50	201.00	1,844.21
59	Lucas, Derby	1,566.93	----------	----------	62.50	105.00	33.18
60	Lyon, Rock Rapids	9,313.75	1,921.45	570.00	2,500.50	664.00	985.85
61	Mahaska, Oskaloosa	19,058.00	13,771.25	1,251.00	2,977.21	1,180.00	4,833.71
62	Marion, Knoxville	8,242.85	3,004.90	1,463.50	1,653.24	815.00	2,002.86
63	Marshall, Marshallt'n (Fair)	15,560.00	4,632.25	405.00	3,390.17	----------	1,187.53
64	Marshall, Marshall'n (Con.)	----------	----------	----------	----------	385.00	1,251.50
65	Mills, Malvern	7,710.79	1,400.00	527.00	1,175.55	----------	394.85

OF COUNTY AND DISTRICT FAIRS IN IOWA IN 1920.

Receipts		Disbursements						
State aid	Total receipts of fair	Premiums other than speed	Speed premiums	Music and attractions	Miscellaneous expense of fair	Total expense of fair	(+) Profit (—) Loss	Number
$ 1,500.00	$ 8,236.76	$ 2,422.99	$ 898.50	$ 1,375.00	$ 2,361,63	$ 7,058.12	$ 1,178.64+	1
889.09	5,021.69	1,315.15	441.30	1,093.10	702.65	3,552.20	1,469.49+	2
877.90	7,284.95	1,296.50	883.50	1,763.50	1,956.39	5,899.89	1,385.06+	3
1,164.34	11,514.99	1,773.90	2,799.80	2.360.00	2,265.48	9,199.18	2,315.81+	4
1,500.00	17,083.65	3,530.45	2,770.00	5,327.66	4,513.95	16,142.06	941.59+	5
1,500.00	23.340.64	5,264.40	2,265.00	7,755.84	8,388.03	23,673.27	332.63—	6
1,500.00	52,471.12	15,839.00	------------	7,402.03	15,867.90	39,108.93	13,362.19+	7
471.73	7,652.41	673.90	2,150.00	2,358.69	1,397.97	6,580.96	1,071.45+	8
1,500.00	19,538.07	3,287.81	1,705.85	5,649.44	6,265.87	16,908.97	2,629.10+	9
573.30	3,419.35	819.00	232.35	652.06	883.04	2,586.45	832.90+	10
1,500.00	7,575.41	3,134.00	------------	3,913.00	1,987.54	9,034.54	1,459.13—	11
1,500.00	13,952.55	3,779.00	635.00	2,600.00	4,104.18	11,118.18	2,834.37+	12
1,500.00	12,102.84	2,492.85	1,293.88	3,149.22	3,052.17	9,988.12	2,114.72+	13
970.27	8,327.01	1,450.45	569.50	3,275.65	2,420.75	7,716.35	610.66+	14
1,500.00	8,238.67	2,497.30	623.15	3,300.00	2,040.77	8,461.22	222.55—	15
1,500.00	12,049.30	2,401.35	2,883.75	3,750.46	2,062.39	11,097.95	951.35+	16
758.00	7,978.26	1,096.67	2,426.90	2,159.90	3,332.82	9,015.84	1,037.58—	17
1,500.00	21,347.43	3,842.35	3,581.50	3,466.00	4,580.32	15,470.17	5,877.26+	18
364.00	4,163.36	520.00	1,410.53	925.00	727.02	3,582.55	580.81+	19
1,500.00	14,072.40	2,522.40	2,310.00	1,558.26	2,353.63	8,744.29	5,328.11+	20
1,500.00	24,560.60	4,430.00	2,439.25	7.426.86	10,533.04	24,829.15	268.55—	21
872.41	8,533.17	1,287.35	924.50	2,155.56	1,656.77	6,024.18	2,508.99+	22
1,500.00	30,789.80	4,896.55	5,576.00	4,119.30	11,471.09	26,062.94	4,726.86+	23
1,207.24	6,045.54	1,845.40	------------	1,065.60	1,405.97	4,316.97	1,728.57+	24
1,108.63	10,035.93	1,681.05	711.00	2,438.20	1,920.11	6,750.36	3,285.57+	25
900.25	6,258.17	1,333.75	475.00	2,135.00	1,731.22	5,674.97	583.20+	26
1,500.00	14,399.02	2,543.10	2,631.47	2,547.00	6,486.24	14,207.81	191.21+	27
733.78	5,952.49	1,056.30	868.00	1,997.00	1,926.06	5,847.36	105.13+	28
1,413.40	10,400.84	2,189.00	2,166.00	4,254.14	1,861.40	10,470.54	69.70—	29
1,401.37	17,035.80	2,168.95	3,711.00	2,584.00	3,341.05	11,805.00	5,230.80+	30
967.24	17,454.03	1,445.40	4,290.00	3,375.00	2,123.98	11,234.38	6,219.65+	31
1,500.00	18,605.41	3,407.50	1,455.00	6,497.00	4,614.61	15,974.11	2,631.30+	32
1,500.00	39,521.43	6,134.40	5,050.00	11,202.06	15,150.02	37,536.48	1,984.95+	33
1,390.00	19,086.95	2,150.00	1,332.50	4,353.20	4,464.03	12,299.73	6,787.22+	34
1,066.51	7,483.18	1,610.85	------------	3,453.50	503.25	5,567.60	1,915.58+	35
1,500.00	11,640.50	2,627.00	357.50	4,225.00	3,708.37	10,917.87	722.63+	36
1,500.00	6,512.10	2,507.25	200.00	1,850.00	3.859.11	8,416.36	1,904.26—	37
1,500.00	8,160.45	3,285.65	2,000.00	835.00	2,414.41	8,535.06	374.61—	38
1,500.00	8,341.93	2,357.95	------------	2,412.00	2,083.38	6,853.33	1,488.60+	39
1,188.55	12,216.76	1,814.25	1,854.00	2,178.00	3,334.93	9,181.18	3,035.58+	40
1,252.24	13,021.68	1,920.40	2,375.00	2,768.75	3,288.07	10,352.22	2,669.46+	41
848.32	9,181.66	1,247.20	573.70	3,102.25	3,209.74	8,132.89	1,048.77+	42
1,500.00	29,682.22	4,079.55	5,888.00	5,349.25	2,807.07	18,123.87	11,558.35+	43
919.02	7,282.62	1,366.70	3,190.00	1,475.00	1,028.12	7,059.82	222.80+	44
1,216.30	11,158.62	1,860.50	2,000.00	3,175.00	2,533.05	9,568.55	1,590.07+	45
770.20	2,940.95	1,117.00	------------	1,002.63	904.04	3,023.67	82.72—	46
1,075.43	12,931.97	1,625.73	2,300.00	1,740.50	3,491.43	9,157.66	3,774.31+	47
1,500.00	16,462.03	2,725.30	3,615.00	4,323.20	2,684.07	13,347.57	3,114.46+	48
1,500.00	15,923.61	2,340.45	4,061.97	3,360.00	3,674.96	13,437.38	2,486.23+	49
1,500.00	13,431.70	2,951.58	2,152.18	4,401.11	3,770.91	13,275.78	155.92+	50
1,500.00	8,556.80	2,447.25	1,820.00	2,050.00	1,852.50	8,169.75	387.05+	51
945.55	8,055.61	1,409.25	2,320.00	1,775.00	1,218.95	6,723.20	1,332.41+	52
1,500.00	21,647.01	2,688.35	2,389.49	3,956.00	6,455.15	15,488.99	6,158.02+	53
704.20	4,980.70	1,007.00	789.00	1,574.25	1,206.28	4,576.53	404.17+	54
1,037.35	6,777.55	1,562.25	2,296.00	2,692.67	2,271.61	8,822.53	1,844.98—	55
1,162.70	10,414.60	1,771.18	944.00	4,045.00	2,421.79	9,181.97	1,232.63+	56
1,500.00	9,774.49	2,574.75	2,460.00	2,187.50	2,375.23	9,597.48	177.01+	57
1,500.00	12,257.96	2,339.30	3,600.00	2,779.10	3,356.36	12,074.76	183.20+	58
633.25	2,400.86	904.65	------------	864.35	720.97	2,489.97	89.11—	59
1,477.00	17,432.55	2,295.00	3,770.00	3,305.00	6,178.15	15,548.15	1,884.40+	60
1,500.00	44,571.17	7,981.25	7,142.00	7,314.00	17,115.62	39,552.87	5,018.30+	61
1,500.00	18,682.35	3,098.40	5,113.00	3,675.00	4,479.93	16,366.33	2,316.02+	62
1,500.00	26,674.95	5,105.20	3,423.50	4,554.78	9,954.20	23,037.68	3,637.27+	63
1,318.00	2,954.50	2,030.00	------------	------------	922.43	2,952.43	2.07+	64
892.96	12,101.15	1,321.60	3,463.67	3,640.32	1,610.72	10,036.31	2,064.84+	65

TABLE NO.

Number	County, City or Town	Receipts					
		Ticket Sales		Entry fees speed department	Concessions and privileges	Advertising in premium list and program	Miscellaneous receipts of fair
		Outside gate	Grand stand				
66	Mitchell, Osage	6,116.65	785.25	385.00	953.52	308.00	2,871.70
67	Monona, Onawa	2,105.00	702.00	----------	559.00	605.00	239.35
68	Monroe, Albia	5,709.42	1,608.93	616.00	1,303.00	488.70	577.69
69	Muscatine, West Liberty	13,663.50	2,008.00	874.00	1,945.00	209.70	1,570.60
70	O'Brien, Sheldon	8,350.50	2,227.75	735.00	1,771.36	819.00	1,730.25
71	Page, Clarinda	10,428.75	2,485.84	----------	1,762.40	211.50	2,445.18
72	Page, Shenandoah	10,081.15	663.90	190.00	1,781.00	----------	1,037.32
73	Pocahontas, Fonda	3,587.25	204.20	520.00	1,640.00	206.00	516.00
74	Pottawattamie, Avoca	4,715.60	989.50	285.00	873.85	----------	541.28
75	Poweshiek, Brooklyn	----------	----------	----------	----------	----------	588.75
76	Poweshiek, Grinnell	6,685.00	2,389.54	521.00	3,877.46	458.25	3,398.75
77	Poweshiek, Malcom	928.00	225.75	172.50	267.00	307.30	177.63
78	Ringgold, Mount Ayr	----------	----------	----------	195.00	294.00	2,320.53
79	Sac, Sac City	7,092.75	1,666.75	644.00	2,218.42	136.00	721.31
80	Scott, Davenport	47,021.88	39,437.75	2,028.00	7,931.55	----------	10,491.48
81	Shelby, Harlan	3,977.75	491.60	450.00	986.08	----------	926.85
82	Sioux, Orange City	4,606.04	391.70	255.00	1,105.00	1,000.00	531.58
83	Story, Ames	4,065.25	350.00	----------	464.60	1,045.00	1,172.00
84	Tama, Toledo	5,364.75	900.00	460.00	1,733.50	----------	1,008.25
85	Taylor, Bedford	6,404.12	880.10	1,002.00	1,621.55	292.00	141.50
86	Van Buren, Milton	2,195.82	----------	300.00	209.00	130.00	200.90
87	Warren, Indianola	5,915.83	2,198.91	562.00	1,394.00	350.50	674.63
88	Wayne, Corydon	10,564.40	5,037.50	752.00	1,517.00	475.00	356.50
89	Webster, Fort Dodge	17,316.15	14,975.70	560.00	4,488.74	75.00	641.71
90	Winnebago, Forest City	2,740.25	1,216.50	368.00	617.50	1,007.50	858.94
91	Winneshiek, Decorah	11,050.90	774.50	----------	2,014.65	407.75	247.60
92	Woodbury, Sioux City	44,238.92	23,446.25	1,726.00	23,297.39	2,902.00	6,329.08
93	Worth, Northwood	2,938.25	199.75	----------	241.00	----------	303.85
94	Wright, Clarion	5,742.75	836.00	608.00	1,189.00	----------	239.00
33a	Dickinson, Milford	----------	----------	----------	25.00	----------	2,100.00
	Totals 1920 (95 Fairs)	$ 699,437.82	$ 235,512.76	$38,610.63	$ 157,508.50	$37,186.51	$ 145,824.76
	Totals 1919 (93 Fairs)	$ 567,273.53	$ 143,263.06	$28,599.29	$ 111,695.16	$24,865.20	$ 88,885.40
	Totals 1918 (89 Fairs)	$ 382,947.45	$ 74,666.01	$42,755.30	$ 64,419.02	----------	$ 73,532.88
	Totals 1917 (93 Fairs)	$ 435,182.48	$ 87,948.12	$45,179.93	$ 80,282.03	----------	$ 59,797.89
	Totals 1916 (99 Fairs)	$ 382,555.23	$ 77,470.19	$47,204.11	$ 71,984.26	----------	$ 67,259.95
	Totals 1915 (93 Fairs)	$ 308,720.82	$ 56,650.00	$37,242.95	$ 58,592.11	----------	$ 55,643.78

1—Continued.

Receipts		Disbursements						
State aid	Total receipts of fair	Premiums other than speed	Speed premiums	Music and attractions	Miscellaneous expense of fair	Total expense of fair	(+) Profit (—) Loss	Number
809.26	12,229.38	1,182.10	2,415.00	2,480.00	3,757.09	9,834.19	2,395.19+	66
723.70	4,934.05	1,039.50	1,000.00	1,234.00	930.60	4,204.10	729.95+	67
1,076.50	11,380.24	1,627.50	3,616.00	2,482.00	3,584.29	11,309.79	70.45+	68
1,500.00	21,770.80	5,159.00	5,174.00	3,548.50	3,717.70	17,599.20	4,171.60+	69
1,149.10	16,782.96	1,748.50	4,535.00	2,860.94	4,948.20	14,092.64	2,690.32+	70
1,402.57	18,736.24	2,170.95	2,175.00	6,133.00	6,395.31	16,874.26	1,861.98+	71
1,249.69	15,003.06	1,916.15	2,550.00	3,939.50	3,829.02	12,234.67	2,768.39+	72
895.45	7,568.90	1,325.75	2,220.00	1,900.00	1,895.00	7,340.75	228.15+	73
1,200.79	8,606.02	1,834.65	2,389.40	2.434.92	2,148.35	8,807.32	201.30—	74
604.80	1,193.55	864.00	------------	208.50	142.76	1,215.32	21.77—	75
1,313.80	18,643.80	2,023.00	2,425.36	3,682.80	15,242.08	23,473.24	4,829.44—	76
589.33	2,667.51	841.90	1,059.00	595.00	1,498.89	3,994.79	1,327.28—	77
818.20	3,627.73	1,197.00	------------	434.80	1,751.29	3,383.09	244.64+	78
1,197.58	13,676.81	1,829.30	2,862.00	3,540.36	3,374.74	11,606.40	2,070.41+	79
1,500.00	108,410.66	7,173.00	12,726.32	19,669.49	42,608.26	82,177.07	26,233.59+	80
1,425.97	8,258.25	2,209.95	2,194.95	1,695.00	1,622.10	7,722.00	536.25+	81
998.05	8,887.37	1,496.75	2,698.00	1,885.75	2,077.12	8,157.62	729.75+	82
1,333.54	8,430.39	2,555.90	300.00	2,503.50	2,400.37	7,259.77	1,170.62+	83
1,379.41	10,845.91	2,132.35	2,767.25	1,265.00	2,727.99	8,892.59	1,953.32+	84
328.40	10,669.67	469.15	3,729.48	2,675.00	2,109.38	8,983.01	1,686.66+	85
1,278.10	4,313.82	1,963.50	1,201.50	475.00	1,001.10	4,641.10	327.28—	86
1,500.00	12,596.77	3,692.75	3,932.25	3,595.00	4,463.20	15,683.20	3,086.43—	87
1,500.00	20,202.40	3,002.80	6,213.50	4,330.40	3,478.53	17,025.23	3,177.17+	88
1,500.00	39,557.30	4,217.88	3,513.36	16,678.39	9,461.97	33,871.60	5,685.70+	89
1,093.42	7,902.11	1,655.70	1,800.00	2,465.00	1,264.08	7,184.78	717.33+	90
975.25	15,470.65	1,458.75	1,780.00	6,009.43	3,865.97	13,114.15	2,356.50+	91
1,500.00	103,439.64	14,579.70	9,756.50	16,095.50	44,785.95	85,217.65	18,221.99+	92
566.39	4,249.24	809.13	------------	1,499.48	731.77	3,040.38	1,208.86+	93
1,333.21	9,947.96	2,025.35	1,950.00	2,338.82	2,834.11	9,178.28	769.68+	94
754.00	2,879.00	1,090.00	------------	150.00	1,611.10	2,851.10	27.90+	33[a]
$ 114,067.24	$1,420,786.46	$ 245,792.97	$ 218.592.11	$ 328,853.97	$ 425,643.21	$ 1,218,512.27	$ 219,753.51+ 17,479.32—	
$ 90,508.50	$1,055,089.14	$ 174,633.07	$ 176,905.35	$ 252,546.57	$ 269,183.01	$ 873,268.00	$ 199,680.55+ 17,859.41—	
$ 51,048.36	$ 689,469.02	$ 129,306.75	$ 146,034.34	$ 161,763.18	$ 214,838.45	$ 651,942.72	$ 65,493.09+ 27,966.79—	
$ 54,817.24	$ 763,207.69	$ 137,226.48	$ 148,359.47	$ 159,441.51	$ 206,611.35	$ 651,638.81	$ 122,791.34+ 11,222.46—	
$ 56,870.67	$ 703,344.41	$ 144,703.25	$ 149,285.42	$ 151,242.79	$ 181,638.68	$ 626,870.14	$ 93,132.24+ 16,657.97—	
$ 48,085.98	$ 564,935.64	$ 117,439.10	$ 127,951.22	$ 115,227.34	$ 160,982.24	$ 521,599.90	$ 62,230.80+ 18,895.06—	

TABLE NO. 2—FINANCIAL STATEMENT OF COUNTY

Number	County and City or Town	Balance on hand	Receipts			
			Receipts of fair	Receipts from sources other than fair	Total receipts	Expense of fair
1	Adair, Greenfield	$ 132.78	$ 8,236.76	------------	$ 8,369.54	$ 7,058.12
2	Adams, Corning	90.87	5,021.69	$ 600.00	5,712.56	3,552.20
3	Allamakee, Waukon	29.66	7,284.95	------------	7,314.61	5,899.89
4	Audubon, Audubon	------------	11,514.99	------------	11,514.99	9,199.18
5	Benton, Vinton	440.47	17,083.65	10,666.29	28,190.41	16,142.06
6	Black Hawk, Cedar Falls	2,230.28	23,340.64	4,539.47	30,110.39	23,673.27
7	Black Hawk, Waterloo	4,894.82	52,471.12	3,150.00	60,515.94	39,108.93
8	Boone, Ogden	13.38	7,652.41	------------	7,665.79	6,580.96
9	Bremer, Waverly	990.59	19,538.07	185.00	20,713.66	16,908.97
10	Buchanan, Aurora	667.54	3,419.35	22.50	4,109.39	2,586.45
11	Buchanan, Jesup	2,516.58	7,575.41	930.00	11,021.99	9,034.54
12	Buchanan, Independence	------------	13,952.55	700.00	14,652.55	11,118.18
13	Buena Vista, Alta	433.63	12,102.84	6,500.00	19,036.47	9,988.12
14	Butler, Allison	2,051.22	8,327.01	4,700.00	15,078.23	7,716.35
15	Calhoun, Manson	1,988.97	8,238.67	9,413.11	19,640.75	8,461.22
16	Calhoun, Rockwell City	686.69	12,049.30	1,000.00	13,735.99	11,097.95
17	Carroll, Carroll	------------	7,978.26	1,767.97	9,746.23	9,015.84
18	Cass, Atlantic	83.98	21,347.43	500.00	21,931.41	15,470.17
19	Cass, Massena	62.24	4,163.36	------------	4,163.36	3,582.55
20	Cedar, Tipton	926.39	14,072.40	10,000.00	24,998.79	8,744.29
21	Cerro Gordo, Mason City	------------	24,560.60	1,500.00	26,060.60	24,829.15
22	Chickasaw, Nashua	26.12	8,533.17	5,461.00	14,020.29	6,024.18
23	Clay, Spencer	7,781.69	30,789.80	------------	38,571.49	26,062.94
24	Clayton, National	378.35	6,045.54	2,050.00	8,473.89	4,316.97
25	Clayton, Elkader	2,471.07	10,035.93	6,015.49	18,522.49	6,750.36
26	Clayton, Strawberry Pt.	------------	6,258.17	1,000.00	7,258.17	5,674.97
27	Clinton, DeWitt	3,870.85	14,399.02	53.00	18,322.87	14,207.81
28	Crawford, Arion	------------	5,952.49	1,850.00	7,802.49	5,847.36
29	Dallas, Perry	------------	10,400.84	1,000.00	11,400.84	10,470.54
30	Davis, Bloomfield	1,904.66	17,035.80	------------	18,940.46	11,805.00
31	Decatur, Leon	------------	17,454.03	70,880.93	88,334.96	11,234.38
32	Delaware, Manchester	1,054.43	18,605.41	8,500.00	28,159.84	15,974.11
33	Des Moines, Burlington	120.50	39,521.43	1,400.00	41,041.93	37,536.48
34	Fayette, West Union	7,135.45	19,086.95	1,296.85	27,519.25	12,299.73
35	Fremont, Hamburg	457.54	7,483.18	14,000.00	21,940.72	5,567.60
36	Greene, Jefferson	5,271.68	11,640.50	354.47	17,266.65	10,917.87
37	Grundy, Grundy Center	897.01	6,512.10	3,600.00	11,009.11	8,416.36
38	Guthrie, Guthrie Center	------------	8,160.45	------------	8,160.45	8,535.06
39	Hamilton, Webster City	1,362.01	8,341.93	707.48	10,411.42	6,853.33
40	Hancock, Britt	541.34	12,216.76	9,000.00	21,758.10	9,181.18
41	Hardin, Eldora	------------	13,021.68	1,150.00	14,171.68	10,352.22
42	Harrison, Missouri Valley	45.28	9,181.66	------------	9,226.94	8,132.89
43	Henry, Mt. Pleasant	102.50	29,682.22	381.00	30,165.72	18,123.87
44	Henry, Winfield	------------	7,282.62	836.66	8,119.28	7,059.82
45	Humboldt, Humboldt	200.00	11,158.62	------------	11,358.62	9,568.55
46	Ida, Ida Grove	------------	2,940.95	------------	2,940.95	3,023.67
47	Jackson, Maquoketa	429.70	12,931.97	------------	13,361.67	9,157.66
48	Jasper, Newton	18.57	16,462.03	------------	16,480.60	13,347.57
49	Jefferson, Fairfield	112.09	15,923.61	2,375.50	18,411.20	13,437.38
50	Jones, Monticello	1,045.28	13,431.70	4,905.00	19,381.98	13,275.78
51	Jones, Anamosa	751.03	8,556.80	3,150.00	12,457.83	8,169.75
52	Keokuk, What Cheer	648.82	8,055.61	------------	8,704.43	6,723.20
53	Kossuth, Algona	774.83	21,647.01	700.00	23,121.84	15,488.99
54	Lee, Donnellson	27.77	4,980.70	300.00	5,308.47	4,576.53
55	Lee, West Point	62.25	6,777.55	2,523.80	9,563.60	8,822.53
56	Linn, Central City	82.67	10,414.60	300.00	10,797.27	9,181.97
57	Linn, Marion	579.88	9,774.49	900.00	11,254.37	9,597.48
58	Louisa, Columbus Juncti	280.49	12,257.96	1,000.00	13,538.45	12,074.76
59	Lucas, Derby	31.51	2,400.86	621.13	3,053.50	2,489.97
60	Lyon, Rock Rapids	6,433.12	17,432.55	------------	23,865.67	15,548.15
61	Mahaska, Oskaloosa	22,432.53	44,571.17	11,600.00	78,603.70	39,552.87
62	Marion, Knoxville	------------	18,682.35	------------	18,682.35	16,366.33
63	Marshall, Mar'llt'n (Fair)	1,583.82	26,674.95	------------	28,258.77	23,037.68
64	Marshall, Mar'llt'n (Con.)	851.93	2,954.50	450.00	4,256.43	2,952.43
65	Mills, Malvern	930.04	12,101.15	8,293.90	21,325.09	10,036.31

AND DISTRICT FAIRS RECEIVING STATE AID IN 1920.

Disbursements			Balance or Overdraft		Assets and Liabilities		
Indebtedness of previous years paid	Improvements and repairs, 1920	Total disbursements	Balance, Nov. 1, 1920	Overdraft, Nov. 1, 1920	Value of grounds and buildings	Present indebtedness	Number
------------	$ 425.00	$ 7,483.12	$ 886.42	------------	$ 20,000.00	$ 1,000.00	1
------------	1,000.00	4,552.20	1,160.36	------------	12,000.00	------------	2
$ 321.00	122.00	6,342.89	971.72	------------	10,000.00	------------	3
80.00	1,052.40	10,331.58	1,183.41	------------	25,000.00	------------	4
5,037.62	5,819.58	26,999.26	1,191.15	------------	30,000.00	11,400.00	5
1,330.00	3,643.47	28,646.74	1,463.65	------------	100,000.00	41,300.00	6
5,004.60	1,448.75	45,562.28	14,953.66	------------	135,000.00	51,000.00	7
------------	644.41	7,225.37	440.42	------------	18,000.00	8,500.00	8
------------	5,083.44	21,992.41	------------	$ 1,278.75	24,000.00	4,980.00	9
------------	766.50	3,352.95	756.44	------------	2,500.00	------------	10
------------	------------	9,034.54	1,987.45	------------	215,000.00	------------	11
------------	------------	11,118.18	3,534.37	------------	20,000.00	5,000.00	12
------------	7,806.89	17,795.01	1,241.46	------------	35,000.00	6,500.00	13
294.70	6,586.58	14,597.63	480.60	------------	15,000.00	2,000.00	14
------------	11,298.59	19,759.81	------------	119.06	24,568.33	8,000.00	15
------------	1,178.49	12,276.44	1,459.55	------------	30,000.00	4,100.00	16
------------	740.26	9,756.10	------------	9.87	18,500.00	6,993.00	17
------------	4,745.51	20,215.68	1,715.73	------------	55,000.00	2,500.00	18
------------	------------	3,582.55	580.81	------------	10,000.00	------------	19
------------	8,945.54	17,689.83	7,308.96	------------	35,000.00	10,000.00	20
3,462.21	1,938.66	30,230.02	------------	4,169.42	120,000.00	14,300.00	21
4,787.20	2,586.38	13,397.76	622.53	------------	20,000.00	------------	22
4,402.33	3,379.36	33,844.63	4,726.86	------------	100,000.00	5,000.00	23
------------	2,543.50	6,860.47	1,613.42	------------	8,500.00	3,000.00	24
1,571.46	10,081.46	18,403.28	119.21	------------	25,000.00	3,200.00	25
------------	1,000.00	6,674.97	583.20	------------	15,000.00	7,500.00	26
------------	2,218.79	16,426.60	1,896.27	------------	15,000.00	------------	27
1,610.76	350.00	7,808.12	------------	5.63	5,000.00	1,850.00	28
------------	------------	10,470.54	930.30	------------	90,000.00	32,000.00	29
------------	6,200.00	18,005.00	935.46	------------	30,000.00	------------	30
------------	77,204.19	88,438.57	------------	103.61	77,204.19	44,680.00	31
2,002.41	10,084.17	28,060.69	99.15	------------	45,000.00	7,500.00	32
2,463.67	1,041.78	41,041.93	------------	------------	125,000.00	55,000.00	33
------------	10,157.82	22,457.55	5,061.70	------------	40,000.00	------------	34
5,043.20	9,940.67	20,551.47	1,389.25	------------	17,000.00	4,000.00	35
------------	1,256.36	12,174.23	5,092.42	------------	25,000.00	5,000.00	36
------------	------------	8,416.36	2,592.75	------------	12,000.00	2,100.00	37
------------	2,121.12	10,656.18	------------	2,495.73	27,500.00	1,800.00	38
319.50	3,033.39	10,206.22	205.20	------------	27,500.00	------------	39
370.00	6,737.37	22,518.55	------------	760.45	25,000.00	2,500.00	40
350.29	1,183.51	11,886.02	2,285.66	------------	22,000.00	3,300.00	41
487.81	179.00	8,799.70	427.24	------------	35,000.00	------------	42
1,221.86	9,746.47	29,092.20	1,073.52	------------	60,000.00	4,000.00	43
476.87	581.59	8,118.28	1.00	------------	22,000.00	5,350.00	44
------------	1,600.00	11,168.55	190.07	------------	40,000.00	4,800.00	45
------------	------------	3,023.67	------------	82.72	------------	------------	46
715.08	3,239.88	13,112.62	249.05	------------	25,000.00	3,000.00	47
------------	3,404.89	16,752.46	------------	271.86	100,000.00	5,200.00	48
1,020.50	4,943.04	19,400.92	------------	989.72	55,000.00	25,000.00	49
------------	6,054.24	19,330.02	51.96	------------	30,000.00	3,800.00	50
2,250.00	1,270.00	11,689.75	768.08	------------	30,000.00	6,985.57	51
675.86	400.00	7,799.06	905.37	------------	17,000.00	3,700.00	52
1,600.00	2,980.15	20,069.14	3,052.70	------------	50,000.00	1,600.00	53
------------	759.91	5,336.44	------------	27.97	5,000.00	400.00	54
------------	703.42	9,525.95	37.65	------------	11,000.00	7,490.00	55
500.00	705.00	10,386.97	410.30	------------	15,000.00	2,000.00	56
545.90	700.00	10,843.38	410.99	------------	22,000.00	7,600.00	57
------------	1,459.04	13,533.80	4.65	------------	20,000.00	3,150.00	58
------------	472.20	2,962.17	91.33	------------	4,600.00	2,300.00	59
------------	539.90	16,088.05	7,777.62	------------	60,000.00	------------	60
18,600.00	19,880.82	78,033.69	570.01	------------	150,000.00	35,600.00	61
------------	686.09	17,052.42	1,629.93	------------	60,750.00	27,100.00	62
------------	1,000.00	24,037.68	4,221.09	------------	60,000.00	------------	63
------------	------------	2,952.43	1,304.00	------------	------------	450.00	64
479.09	8,996.87	19,512.27	1,812.82	------------	25,000.00	16,000.00	65

TABLE NO.

Number	County and City or Town	Balance on hand	Receipts			
			Receipts of fair	Receipts from sources other than fair	Total receipts	Expense of fair
66	Mitchell, Osage	58.45	12,229.38	------------	12,287.83	9,834.19
67	Monona, Onawa	494.97	4,934.05	499.50	5,928.52	4,204.10
68	Monroe, Albia	1,031.27	11,380.24	1,751.33	14,162.84	11,309.79
69	Muscatine, West Liberty	6,621.10	21,770.80	750.00	29,141.90	17,599.20
70	O'Brien, Sheldon	680.76	16,782.96	1,400.00	18,863.72	14,092.64
71	Page, Clarinda	68.95	18,736.24	550.00	19,355.19	16,874.26
72	Page, Shenandoah	1,888.29	15,003.06	5,051.95	21,943.30	12,234.67
73	Pocahontas, Fonda	1,707.12	7,568.90	------------	9,276.02	7,340.75
74	Pottawattamie, Avoca	661.59	8,606.02	2,110.11	11,377.72	8,807.32
75	Poweshiek, Brooklyn	30.29	1,193.55	------------	1,223.84	1,215.32
76	Poweshiek, Grinnell	296.38	18,643.80	------------	18,940.18	23,473.24
77	Poweshiek, Malcom	268.22	2,667.51	1,350.00	4,285.73	3,994.79
78	Ringgold, Mount Ayr	------------	3,627.73	------------	3,627.73	3,383.09
79	Sac, Sac City	806.39	13,676.81	630.89	15,114.09	11,606.40
80	Scott, Davenport	------------	108,410.66	317,650.94	426,061.60	82,177.07
81	Shelby, Harlan	3,027.08	8,258.25	------------	11,285.33	7,722.00
82	Sioux, Orange City	1,364.81	8,887.37	5,200.00	15,452.18	8,157.62
83	Story, Ames	139.65	8,430.39	------------	8,570.04	7,259.77
84	Tama, Toledo	17.57	10,845.91	------------	10,863.48	8,892.59
85	Taylor, Bedford	3,957.85	10,669.67	51.71	14,679.23	8,983.01
86	Van Buren, Milton	------------	4,313.82	------------	4,313.82	4,641.10
87	Warren, Indianola	------------	12,596.77	4,726.65	17,323.42	15,683.20
88	Wayne, Corydon	3,707.37	20,202.40	3,725.39	27,635.16	17,025.23
89	Webster, Fort Dodge	------------	39,557.30	1,000.00	40,557.30	33,871.60
90	Winnebago, Forest City	------------	7,902.11	------------	7,902.11	7,184.78
91	Winneshiek, Decorah	268.71	15,466.65	800.00	16,539.36	13,114.15
92	Woodbury, Sioux City	31,425.02	103,439.64	91,034.43	225,899.09	85,217.65
93	Worth, Northwood	1,409.92	4,249.24	------------	5,659.16	3,040.38
94	Wright, Clarion	------------	9,947.96	1,500.00	11,447.96	9,178.28
33[a]	Dickinson, Milford	------------	2,879.00	------------	2,879.00	2,851.10
	Totals 1920 (95 Fairs)	$ 148,868.66	$1,420,786.46	$ 662,613.45	$ 2,232,206.33	$ 1,218,512.27
	Totals 1919 (93 Fairs).	$ 65,144.96	$1,055,089.14	$ 230,507.56	$ 1,350,741.66	$ 873,268.00
	Totals 1918 (89 Fairs).	$ 73,010.80	$ 689,469.02	$ 112,233.60	$ 874,713.42	$ 651,942.72
	Totals 1917 (93 Fairs).	$ 51,620.20	$ 763,207.69	$ 182,706.77	$ 942,717.42	$ 651,638.81
	Totals 1916 (99 Fairs).	$ 48,355.73	$ 703,344.41	$ 194,738.86	$ 889,568.33	$ 626,870.14
	Totals 1915 (93 Fairs).	$ 36,480.71	$ 564,935.64	$ 188,684.12	$ 742,014.00	$ 521,599.90

2—Continued.

Disbursements			Balance or Overdraft		Assets and Liabilities		
Indebtedness of previous years paid	Improvements and repairs, 1920	Total disbursements	Balance, Nov. 1, 1920	Overdraft, Nov. 1, 1920	Value of grounds and buildings	Present Indebtedness	Number
1,706.55	413.48	11,954.22	333.61	------------	20,000.00	------------	66
------------	493.31	4,697.41	1,231.11	------------	18,000.00	4,000.00	67
910.31	1,091.05	13,311.15	851.69	------------	5,000.00	750.00	68
------------	9,930.27	27,529.47	1,612.43	------------	24,000.00	750.00	69
351.28	4,277.97	18,721.89	141.83	------------	50,000.00	1,400.00	70
1,418.25	934.96	19,227.47	127.72	------------	9,500.00	------------	71
5,774.75	1,603.20	19,612.62	2,330.68	------------	18,000.00	3,260.27	72
------------	275.00	7,615.75	1,660.27	------------	15,000.00	------------	73
460.00	6,391.90	15,659.22	------------	4,281.50	26,000.00	600.00	74
------------	------------	1,215.32	8.52	------------	7,000.00	------------	75
207.73	1,576.36	25,257.33	------------	6,317.15	30,000.00	9,150.00	76
------------	------------	3,994.79	290.94	------------	10,000.00	5,000.00	77
------------	------------	3,383.09	244.64	------------	------------	------------	78
1,100.00	1,642.56	14,348.96	765.13	------------	25,000.00	7,300.00	79
------------	315,747.53	397,924.60	28,137.00	------------	449,440.67	161,309.61	80
------------	2,800.76	10,522.76	762.57	------------	25,000.00	------------	81
1,124.17	5,839.86	15,121.65	330.53	------------	25,000.00	6,500.00	82
684.10	868.00	8,875.87	------------	305.83	12,000.00	3,850.00	83
------------	234.50	9,127.09	1,736.39	------------	25,000.00	9,000.00	84
------------	522.81	9,505.82	5,173.41	------------	9,000.00	------------	85
------------	------------	4,641.10	------------	327.28	8,000.00	4,500.00	86
------------	1,640.00	17,323.20	.22	------------	30,000.00	4,218.34	87
4,155.76	4,572.09	25,753.08	1,882.08	------------	48,000.00	6,300.00	88
------------	------------	33,871.60	6,685.70	------------	300,000.00	117,401.00	89
------------	599.56	7,784.34	117.77	------------	20,000.00	5,750.00	90
------------	3,361.78	16,475.93	63.43	------------	25,000.00	3,800.00	91
------------	130,933.79	216,151.44	9,747.65	------------	250,000.00	15,000.00	92
------------	399.17	3,439.55	2,219.61	------------	7,000.00	------------	93
601.50	250.00	10,029.78	1,418.18	------------	20,000.00	10,000.00	94
------------	------------	2,851.10	27.90	------------	12,000.00	------------	33^a
$ 85,518.32	$ 780,968.36	$ 2,091,392.95	$ 162,359.93	$ 21,546.55	$ 4,526,599.19	$ 901.367.79	
$ 78,517.22	$ 236,534.13	$ 1,188,319.35	$ 168,859.40	$ 6,437.09	$ 2,707,269.95	$ 459,163.99	
$ 36,761.22	$ 121,950.89	$ 810,654.83	$ 83,904.16	$ 19,845.57	$ 1,906,203.86	$ 326,280.74	
$ 85,592.90	$ 96,464.95	$ 833,696.66	$ 114,718.13	$ 5,697.37	$ 1,629,082.99	$ 320,743.84	
$ 71,687.90	$ 138,269.99	$ 836,828.03	$ 74,341.91	$ 21,601.61	$ 1,588,885.00	$ 261,155.40	
$ 39,156.93	$ 102,102.92	$ 688,291.21	$ 63,491.98	$ 9,769.19	$ 988,128.44	$ 267,299.26	

TABLE NO. 3—TOTAL NUMBER OF EXHIBITORS, NUMBER EXHIBITORS SHEEP AND POULTRY ON EXHIBITION AND

Number	County and City or Town	Number of exhibitors	Number of exhibitors in live stock department	Horses		Cattle		Swine	
				No. exhibited	Premiums paid	No. exhibited	Premiums paid	No. exhibited	Premiums paid
1	Adair, Greenfield	103	56	42	$ 343.50	41	$ 435.00	293	$ 497.50
2	Adams, Corning	208	51	45	223.00	99	303.50	160	236.00
3	Allamakee, Waukon	363	77	47	195.50	33	156.00	176	376.00
4	Audubon, Audubon	219	123	36	260.00	96	716.00	593	230.50
5	Benton, Vinton	761	178	97	724.00	201	1,778.00	563	518.00
6	Black Hawk, Cedar Falls	739	338	90	334.90	655	1,850.00	372	416.00
7	Black Hawk, Waterloo	633	166	281	4,947.00	587	10,242.00	------	----------
8	Boone, Ogden	87	14	26	174.00	19	109.50	43	161.00
9	Bremer, Waverly	468	89	52	426.50	163	1,313.50	248	670.00
10	Buchanan, Aurora	59	43	30	97.25	27	135.00	107	187.00
11	Buchanan, Jesup	284	145	65	168.00	232	1,446.00	303	865.00
12	Buchanan, Independence	259	154	65	235.00	318	1,706.00	501	1,421.00
13	Buena Vista, Alta	201	98	46	105.00	41	289.00	756	1,445.00
14	Butler, Allison	418	41	15	139.00	50	420.00	98	304.00
15	Calhoun, Manson	228	38	61	280.50	88	712.50	303	710.50
16	Calhoun, Rockwell City	123	47	50	377.00	79	603.00	500	708.00
17	Carroll, Carroll	61	23	1	12.00	98	518.00	98	251.77
18	Cass, Atlantic	342	210	110	507.00	122	910.50	735	1,403.50
19	Cass, Massena	73	23	------	----------	17	196.00	86	184.00
20	Cedar, Tipton	408	121	48	415.00	86	512.50	236	357.00
21	Cerro Gordo, Mason City	741	85	124	782.00	180	1,203.00	530	722.00
22	Chickasaw, Nashua	197	62	78	171.50	131	434.40	155	214.00
23	Clay, Spencer	599	149	60	390.00	222	1,496.00	1,782	1,874.00
24	Clayton, National	113	46	32	119.00	112	604.00	175	343.50
25	Clayton, Elkader	320	36	24	134.0	42	281.00	300	493.00
26	Clayton, Strawberry Point	136	37	15	109.	97	519.00	105	316.50
27	Clinton, DeWitt	793	32	21	180.	123	702.00	610	520.00
28	Crawford, Arion	189	129	17	78.	39	167.00	410	319.00
29	Dallas, Perry	265	83	74	274.0	46	448.00	504	1,038.00
30	Davis, Bloomfield	235	93	47	583.0	66	594.00	84	233.00
31	Decatur, Leon	528	180	28	218.5	93	350.00	218	422.00
32	Delaware, Manchester	374	211	42	195.0	312	1,672.00	508	877.00
33	Des Moines, Burlington	356	39	32	382.0	113	1,106.00	201	1,579.50
34	Fayette, West Union	231	116	100	361.0	360	761.00	257	368.00
35	Fremont, Hamburg	194	61	107	350.0	70	520.00	161	292.00
36	Greene, Jefferson	246	90	65	278.0	97	606.00	1,025	818.00
37	Grundy, Grundy Center	135	80	60	365.0	100	871.50	400	647.25
38	Guthrie, Guthrie Center	234	110	40	181.0	160	1,651.00	468	830.00
39	Hamilton, Webster City	368	85	51	295.5	90	451.00	440	675.50
40	Hancock, Britt	137	56	30	227.0	41	307.00	225	689.00
41	Hardin, Eldora	225	65	82	353.00	36	202.00	210	254.00
42	Harrison, Missouri Valley	168	37	35	163.00	60	349.00	248	296.00
43	Henry, Mt. Pleasant	670	104	105	821.00	93	854.00	401	746.00
44	Henry, Winfield	68	26	71	318.00	49	395.00	80	217.00
45	Humboldt, Humboldt	165	40	40	269.00	60	275.00	400	485.00
46	Ida, Ida Grove	294	67	9	45.00	53	204.00	130	480.00
47	Jackson, Maquoketa	------	120	125	141.00	125	612.00	502	247.50
48	Jasper, Newton	229	44	35	264.75	70	331.50	580	618.95
49	Jefferson, Fairfield	186	86	37	247.00	90	695.00	283	778.50
50	Jones, Monticello	218	46	22	153.00	69	1,355.00	179	606.00
51	Jones, Anamosa	232	101	69	349.00	72	909.00	432	698.50
52	Keokuk, What Cheer	103	34	14	84.00	81	654.00	96	286.00
53	Kossuth, Algona	572	60	65	269.50	65	519.00	169	450.50
54	Lee, Donnellson	76	28	26	245.00	18	136.00	58	145.00
55	Lee, West Point	62	22	23	217.00	44	487.00	26	342.00
56	Linn, Central City	172	81	55	202.05	104	685.80	229	414.90
57	Linn, Marion	202	100	38	135.00	140	1,220.00	285	496.00
58	Louisa, Columbus Junction	155	62	38	260.50	76	574.00	239	690.00
59	Lucas, Derby	243	63	66	155.75	39	130.50	63	134.00
60	Lyon, Rock Rapids	290	68	66	378.00	84	613.00	310	579.50
61	Mahaska, Oskaloosa	903	148	136	1,229.00	223	2,083.00	599	1,819.00
62	Marion, Knoxville	430	110	50	303.00	112	728.00	165	999.00
63	Marshall, Marshalltown (Fair)	1,450	145	170	456.00	196	1,288.00	910	1,147.00
64	Marshall, Marshalltown (Congress	201	23	------	----------	------	----------	103	792.00
65	Mills, Malvern	135	40	50	206.00	60	292.50	140	285.00

IN LIVE STOCK DEPARTMENT, NUMBER HORSES, CATTLE, SWINE, AMOUNT OF PREMIUMS PAID IN EACH DIVISION.

Sheep		Poultry		Premiums Paid						
No. exhibited	Premiums paid	No. exhibited	Premiums paid	Agricultural products	Fruits, plants and flowers	Culinary products	Textile and art department	School exhibit, boys' and girls' department	All other departments	Number
30	$ 62.00	206	$ 137.75	$ 283.15	$ 84.10	$ 127.50	$ 146.50	$ 75.00	$ 230.99	1
37	88.00	480	161.00	88.15	54.50	41.75	61.25	58.00	--------	2
12	27.00	400	106.00	66.25	77.75	82.50	82.00	127.50	--------	3
--------	--------	180	111.70	193.90	51.15	57.50	108.40	23.75	21.00	4
87	125.00	673	31.50	150.25	67.25	40.25	82.25	13.95	--------	5
40	195.00	376	110.50	265.00	102.25	90.75	220.25	1,679.75	--------	6
--------	--------	--------	--------	--------	--------	--------	--------	150.00	500.00	7
6	19.00	34	13.95	19.25	4.75	66.45	106.00	--------	--------	8
35	107.00	208	59.00	127.40	75.30	115.30	175.65	85.45	132.71	9
5	5.00	159	126.50	80.25	22.25	41.50	61.50	25.60	37.15	10
32	48.00	350	170.00	132.75	113.00	59.50	131.75	--------	--------	11
23	34.00	460	197.00	186.00	--------	--------	--------	--------	--------	12
--------	--------	144	70.50	51.50	25.25	81.70	128.40	296.50	--------	13
12	31.00	200	72.00	92.35	43.65	121.75	76.70	150.00	--------	14
28	28.00	220	67.90	120.35	166.35	29.05	252.70	129.45	--------	15
48	129.00	52	77.00	85.75	7.75	122.35	232.00	59.50	--------	16
--------	--------	--------	--------	22.00	--------	--------	113.75	38.42	140.73	17
105	203.50	835	157.75	112.00	90.50	100.50	274.10	83.00	--------	18
26	66.00	18	4.00	6.75	26.75	8.50	28.00	--------	--------	19
39	216.00	127	49.00	108.00	64.30	73.25	118.45	583.90	25.00	20
89	385.00	93	48.75	155.00	81.50	149.30	194.40	679.80	29.25	21
41	68.50	197	66.00	39.25	56.75	41.25	143.00	52.70	--------	22
126	248.00	340	143.75	266.50	84.30	68.75	160.25	165.00	--------	23
36	99.00	52	49.00	61.75	61.70	115.95	223.75	63.75	104.00	24
40	135.00	100	53.75	44.90	68.65	42.50	129.50	176.00	122.75	25
13	57.00	90	42.50	54.25	32.25	89.25	88.50	25.50	--------	26
16	44.00	42	58.00	109.00	154.50	151.00	351.00	263.60	10.00	27
16	64.00	51	15.00	87.80	77.90	45.15	94.95	107.50	--------	28
55	115.00	90	25.00	70.50	--------	72.50	120.00	26.00	--------	29
56	278.00	140	76.70	80.25	59.50	28.50	148.00	40.75	47.25	30
6	15.00	183	87.80	95.75	82.75	71.35	22.25	80.00	--------	31
51	118.00	177	58.75	80.75	--------	212.00	--------	127.00	67.00	32
110	470.50	765	252.85	809.75	--------	494.47	679.50	359.83	--------	33
51	81.00	206	97.50	167.75	79.00	41.25	138.00	55.50	--------	34
--------	--------	125	47.75	67.50	51.00	58.00	218.75	2.85	3.00	35
180	343.00	139	41.25	175.00	--------	110.50	155.25	--------	100.00	36
12	60.00	150	113.95	74.25	83.60	82.30	121.00	88.40	--------	37
49	87.00	120	56.50	261.85	20.50	91.00	79.45	10.85	16.50	38
28	93.00	402	245.50	188.25	--------	94.00	97.45	217.75	--------	39
33	155.00	232	68.75	125.25	50.25	89.00	93.00	9.25	.75	40
35	119.00	115	133.25	91.00	61.50	52.95	205.50	355.20	93.00	41
14	25.00	77	32.25	55.75	66.25	66.25	78.25	106.45	9.00	42
109	287.00	942	308.40	207.50	119.25	163.65	359.00	213.75	--------	43
34	104.00	41	33.50	45.75	45.00	78.00	114.70	15.75	--------	44
25	59.00	400	42.00	125.00	70.50	80.00	188.00	137.00	130.00	45
--------	--------	60	33.00	149.50	59.25	82.50	63.75	--------	--------	46
25	37.00	263	27.00	561.23	--------	--------	--------	--------	--------	47
40	72.75	295	95.25	115.90	107.00	233.00	358.00	354.50	173.70	48
48	181.00	131	96.50	75.25	56.75	46.20	132.25	32.00	--------	49
--------	--------	64	120.00	341.50	36.00	90.00	72.50	102.50	75.08	50
35	51.50	169	70.50	115.50	37.50	92.50	47.75	55.50	20.00	51
16	58.00	185	113.00	50.00	44.50	74.50	38.75	--------	6.50	52
24	112.50	342	82.25	131.00	120.25	229.50	249.25	441.60	83.00	53
42	122.50	62	37.00	74.50	139.50	--------	107.50	--------	--------	54
44	313.00	30	24.50	5.25	9.00	13.50	138.25	12.75	--------	55
37	63.00	268	93.38	56.03	43.88	53.78	69.03	79.20	10.13	56
48	95.00	163	186.25	75.50	10.75	74.00	47.25	235.00	--------	57
10	28.00	176	143.50	145.75	94.50	159.50	239.55	4.00	--------	58
21	64.00	116	83.50	95.00	47.00	60.55	69.45	64.90	--------	59
19	60.00	115	49.50	286.25	39.00	121.75	85.25	79.25	3.50	60
120	309.00	240	135.75	751.50	138.50	111.25	401.25	1,003.00	--------	61
35	180.00	326	103.90	96.00	98.75	79.00	104.00	160.25	246.50	62
120	382.00	963	248.85	237.25	200.00	262.00	362.00	500.10	22.00	63
--------	--------	--------	--------	1,137.50	--------	32.50	18.00	--------	50.00	64
40	121.00	120	74.75	49.75	4.75	110.75	115.45	4.90	56.75	65

TABLE NO.

Number	County and City or Town	Number of exhibitors	Number of exhibitors in live stock department	Horses		Cattle		Swine	
				No. exhibited	Premiums paid	No. exhibited	Premiums paid	No. exhibited	Premiums paid
66	Mitchell, Osage	126	34	26	135.00	93	458.00	12	198.00
67	Monona, Onawa	108	29	9	52.00	23	120.00	8	229.00
68	Monroe, Albia	171	78	84	432.00	27	229.50	125	441.50
69	Muscatine, West Liberty	300	140	86	603.00	110	1,520.00	570	1,160.00
70	O'Brien, Sheldon	227	55	25	95.00	25	319.00	201	860.00
71	Page, Clarinda	240	31	75	456.50	78	368.50	130	498.00
72	Page, Shenandoah	196	25	30	426.50	40	449.00	200	516.00
73	Pocahontas, Fonda	115	25	------	----------	45	213.00	381	780.00
74	Pottawattamie, Avoca	134	55	------	----------	52	595.00	475	815.00
75	Poweshiek, Brooklyn	245	109	68	178.00	24	102.00	131	284.00
76	Poweshiek, Grinnell	138	107	28	296.50	75	941.00	103	281.00
77	Poweshiek, Malcom	107	24	21	109.00	12	146.00	75	220.00
78	Ringgold, Mount Ayr	593	83	39	103.00	81	275.00	80	194.00
79	Sac, Sac City	230	49	15	141.30	68	652.40	318	456.20
80	Scott, Davenport	436	96	111	1,659.00	210	1,976.00	1,035	1,740.00
81	Shelby, Harlan	125	80	25	278.00	80	894.50	500	588.00
82	Sioux, Orange City	137	88	86	302.50	115	370.00	296	465.00
83	Story, Ames	265	51	74	518.00	43	264.00	313	431.00
84	Tama, Toledo	382	128	38	142.00	88	712.00	362	447.00
85	Taylor, Bedford	71	24	15	47.00	22	67.00	28	176.50
86	Van Buren, Milton	104	27	60	760.50	32	458.50	150	210.50
87	Warren, Indianola	286	94	61	777.50	74	503.00	304	1,104.00
88	Wayne, Corydon	223	75	141	869.55	44	344.00	253	584.00
89	Webster, Fort Dodge	296	142	92	1,100.84	215	1,141.85	520	980.42
90	Winnebago, Forest City	106	50	16	57.50	55	177.50	152	337.25
91	Winneshiek, Decorah	82	17	4	30.00	75	517.00	125	362.50
92	Woodbury, Sioux City	536	229	70	1,135.00	352	4,324.50	2,575	4,606.00
93	Worth, Northwood	213	33	16	44.00	31	77.75	128	219.50
94	Wright, Clarion	163	40	4	41.00	68	668.00	257	812.00
33ᵃ	Dickinson, Milford	107	58	------	----------	------	----------	519	805.00
	Totals 1920 (95 Fairs)	26,339	7,611	5,000	$33,692.39	9,822	$73,572.20	32,084	$59,121.24
	Totals 1919 (93 Fairs)	23,751	5,881	4,342	$30,412.15	7,049	$49,285.67	19,815	$34,687.20
	Totals 1918 (89 Fairs)	21,108	4,863	3,911	$24,230.74	5,579	$31,889.76	12,111	$20,580.31
	Totals 1917 (93 Fairs)	24,218	4,459	5,552	$28,948.43	5,689	$33,992.13	10,695	$17,213.64
	Totals 1916 (99 Fairs)	23,955	4,454	6,836	$32,877.66	7,080	$37,440.65	11,151	$17,435.45
	Totals 1915 (93 Fairs)	20,687	4,144	6,036	$26,913.53	5,270	$27,628.92	9,377	$14,034.45

3—Continued.

Sheep		Poultry		Premiums Paid						
No. exhibited	Premiums paid	No. exhibited	Premiums paid	Agricultural products	Fruits, plants and flowers	Culinary products	Textile and art department	School exhibit, boys' and girls' department	All other departments	Number
1	2.00	104	83.50	56.50	24.25	36.40	139.70	28.75	20.00	66
15	32.00	115	70.75	104.25	31.00	113.25	202.25	85.00	----------	67
47	244.25	47	56.00	77.25	40.50	34.75	68.75	3.00	----------	68
93	428.00	175	87.50	184.50	94.00	161.00	281.25	616.75	23.00	69
11	31.00	106	73.00	92.75	28.50	103.00	106.25	32.00	8.00	70
68	221.00	182	94.50	107.00	60.50	79.75	179.70	80.50	25.00	71
30	69.50	70	33.45	87.25	59.50	38.00	185.75	49.20	2.00	72
--------	----------	55	51.00	57.75	23.00	73.75	107.25	20.00	----------	73
20	54.00	137	80.00	59.00	45.00	62.00	73.40	41.00	10.25	74
28	67.50	148	29.50	86.00	33.50	83.50	----------	----------	----------	75
14	61.00	100	41.50	46.25	67.50	100.75	111.50	68.00	8.00	76
9	33.00	18	9.75	153.75	36.00	5.00	38.15	57.00	34.25	77
36	52.00	405	113.00	220.25	14.25	67.50	61.50	81.50	15.00	78
11	25.00	168	75.50	50.11	9.67	98.21	171.58	134.33	15.00	79
117	528.00	344	242.75	387.00	118.75	----------	125.50	295.75	100.25	80
40	82.50	100	37.00	20.00	25.00	30.65	121.00	18.30	115.00	81
--------	----------	250	28.50	37.50	20.90	15.00	6.00	159.40	91.95	82
49	89.00	300	203.65	244.75	----------	71.50	51.25	82.75	----------	83
30	68.50	183	77.50	123.75	52.25	165.80	282.55	53.00	8.00	84
--------	----------	19	7.25	16.75	13.00	35.45	62.45	43.75	----------	85
20	69.00	200	54.50	33.00	78.00	86.75	140.50	72.25	----------	86
48	246.00	370	275.75	125.00	173.50	88.00	267.50	82.50	50.00	87
190	681.00	125	84.00	199.25	44.75	120.50	72.75	----------	3.00	88
26	64.00	275	164.27	202.90	----------	164.83	153.77	245.00	----------	89
31	84.00	180	95.75	194.25	25.50	177.60	44.50	460.85	1.00	90
12	114.00	166	100.50	57.25	102.25	88.75	70.50	16.00	----------	91
186	923.00	650	321.75	493.50	----------	143.00	456.20	1,132.50	1,044.25	92
19	37.00	180	52.00	136.00	47.75	76.48	20.00	20.05	78.60	93
16	66.00	88	101.50	44.50	4.00	29.00	70.25	49.10	170.00	94
--------	----------	150	21.75	54.75	----------	----------	----------	208.50	----------	33ª
3,681	$11,516.00	19,889	$ 8,507.25	$14,034.27	$ 5,043.20	$ 8,125.92	$12,994.07	$14,380.26	$ 4,389.79	
3,217	$ 8,535.70	17,351	$ 7,143.30	$ 9,958.92	$ 4,213.64	$ 6,168.88	$12,295.95	$ 9,462.68	$ 2,536.27	
2,895	$ 7,059.30	15,767	$ 6,566.67	$12,088.55	----------	$ 6,680.73	$ 8,639.97	----------	$ 11,570.72	
3,007	$ 7,120.03	16,184	$ 6,822.27	$11,685.07	----------	$ 6,927.21	$11,251.14	----------	$ 13,266.56	
2,897	$ 7,291.30	15,762	$ 6,678.76	$11,993.45	----------	$ 6,611.62	$11,176.08	----------	$ 13,122.53	
2,783	$ 6,140.77	14,317	$ 5,397.08	$ 9,934.51	----------	$ 6,307.62	$ 8,710.29	----------	$ 12,711.43	

TABLE NO. 4—TOTAL PAID ADMISSIONS AND ADMISSION FEES CHARGED AT COUNTY AND DISTRICT FAIRS IN IOWA FOR 1920.

Number	County and City or Town	Total attendance	Total paid admissions	Outside Gate Admissions			Grandstand					
				Adult	Vehicle	Children	Admissions				Total day admissions	Total night admissions
1	Adair, Greenfield	11,110	10,207	$.50	$.25	$.25	$.15	$.25	----	----	1,997	596
2	Adams, Corning	8,000	4,500	.50	.25	.25	----	----	----	----	--------	--------
3	Allamakee, Waukon	15,000	14,500	.65	.25	.25	.10	.25	----	----	938	328
4	Audubon, Audubon	20,000	11,434	.50	.35	.25	.15	.30	----	----	3,023	1,737
5	Benton, Vinton	22,868	20,015	.50	.25	.25	----	.25	$.35	----	4,876	2,776
6	Black Hawk, Cedar Falls	40,057	24,545	.50	.25	.25	----	.25	.50	----	13,874	4,624
7	Black Hawk, Waterloo	76,320	58,921	.50	.50	.25	----	.25	.35	----	15,850	11,632
8	Boone, Ogden	--------	7,992	.50	.50	.25	----	.25	----	----	673	--------
9	Bremer, Waverly	16,846	13,024	.50	----	----	----	.25	----	----	5,280	3,251
10	Buchanan, Aurora	4,000	3,022	.50	.25	.25	----	----	----	----	--------	--------
11	Buchanan, Jesup	12,312	9,112	.50	.25	.25	----	----	----	----	--------	--------
12	Buchanan, Independence	20,000	16,452	.50	.25	----	----	.25	----	----	2,440	1,324
13	Buena Vista, Alta	13,618	12,218	.65	.25	.35	----	.25	----	----	1,437	--------
14	Butler, Allison	10,100	9,115	.50	.25	.25	----	.25	----	----	2,520	935
15	Calhoun, Manson	7,085	7,085	.50	.25	.25	----	.25	----	----	3,379	--------
16	Calhoun, Rockwell City	10,250	4,147	.50	.25	----	----	.25	.35	----	2,653	859
17	Carroll, Carroll	9,116	8,832	.50	.50	.25	----	.25	----	----	1,118	--------
18	Cass, Atlantic	30,425	25,620	.50	.50	.25	----	----	.35	$.50	6,856	1,413
19	Cass, Massena	6,300	5,361	.50	.25	.25	.15	----	----	----	904	--------
20	Cedar, Tipton	17,500	13,472	.50	.50	.25	----	.25	----	----	4,539	1,581
21	Cerro Gordo, Mason City	27,500	16,744	.75	.25	.25	----	----	.50	----	5,421	3,300
22	Chickasaw, Nashua	11,000	8,410	.50	----	.25	----	.25	----	----	4,644	1,000
23	Clay, Spencer	42,000	37,341	.75	.25	.25	----	.25	.35	1.00	8,152	2,314
24	Clayton, National	6,900	6,025	.50	.50	.25	----	.25	----	----	970	--------
25	Clayton, Elkader	9,100	6,901	.50	.50	.25	----	.25	----	----	1,488	411
26	Clayton, Strawberry Point	12,000	10,000	.50	.25	.25	.15	.25	----	----	2,800	1,500
27	Clinton, DeWitt	17,000	13,929	.50	.50	.25	----	.25	----	----	8,230	--------
28	Crawford, Arion	10,055	8,041	.50	.50	----	----	.25	----	----	896	--------
29	Dallas, Perry	10,250	8,150	.75	.50	.25	----	.50	.75	1.00	3,655	--------
30	Davis, Bloomfield	35,000	25,000	.50	.25	----	----	.25	----	----	6,500	2,597
31	Decatur, Leon	19,176	17,676	.50	.25	.25	----	.25	.50	----	12,280	5,396
32	Delaware, Manchester	25,000	16,500	.50	.25	----	----	.25	----	----	3,360	3,503
33	Des Moines, Burlington	41,300	37,256	.50	.25	.25	----	.27	.50	----	17,706	12,770
34	Fayette, West Union	35,000	35,000	.35	.50	----	----	.25	----	----	4,799	2,551
35	Fremont, Hamburg	7,420	7,062	.75	.35	.50	----	.25	----	----	2,774	--------
36	Greene, Jefferson	15,055	8,219	.50	.25	.25	----	.25	----	----	5,075	4,956
37	Grundy, Grundy Center	1,800	1,300	.50	.35	.25	----	.25	----	----	375	125
38	Guthrie, Guthrie Center	10,000	9,763	.50	.50	.35	----	----	----	----	--------	--------
39	Hamilton, Webster City	10,000	8,461	.50	.25	.25	----	----	----	----	--------	--------
40	Hancock, Britt	12,500	12,250	.75	.50	.25	----	.25	----	----	1,736	--------
41	Hardin, Eldora	18,000	16,936	.50	.50	.25	----	.25	----	----	3,140	4,080
42	Harrison, Missouri Valley	20,000	15,074	.50	.35	.25	.10	.25	----	----	3,875	900
43	Henry, Mt. Pleasant	40,000	26,604	.50	.25	----	----	----	.50	1.00	8,521	6,126
44	Henry, Winfield	8,275	7,384	.50	.25	.25	.15	.25	----	----	3,564	1,286
45	Humboldt, Humboldt	20,000	12,132	.50	.25	.25	----	.25	.35	----	3,097	1,616
46	Ida, Ida Grove	6,000	--------	----	----	----	----	----	----	----	--------	--------
47	Jackson, Maquoketa	18,000	18,000	.50	.50	.25	----	.25	----	----	6,436	--------
48	Jasper, Newton	22,000	16,774	.50	.50	----	----	.25	----	----	5,551	3,460
49	Jefferson, Fairfield	13,586	13,386	.50	.25	.25	----	.25	----	----	3,322	4,003
50	Jones, Monticello	20,000	12,600	.50	.50	.25	.15	.25	----	----	4,042	2,474
51	Jones, Anamosa	10,510	6,268	.50	.50	.25	.15	.25	----	----	5,469	--------
52	Keokuk, What Cheer	11,500	9,505	.50	.25	.25	----	----	.40	----	2,600	1,000
53	Kossuth, Algona	45,000	22,967	.75	.25	.25	----	.25	----	----	4,525	1,984
54	Lee, Donnellson	7,186	6,066	.50	.25	.25	----	----	----	----	--------	--------
55	Lee, West Point	3,600	2,600	.50	.25	----	----	.25	----	----	800	776
56	Linn, Central City	11,183	9,183	.50	.25	.25	----	.25	----	.50	4,338	3,055
57	Linn, Marion	14,000	10,500	.50	.50	.25	----	.25	----	----	5,600	1,600
58	Louisa, Columbus Junction	12,004	11,648	.50	.25	.25	----	.25	----	----	3,511	1,886
59	Lucas, Derby	3,744	3,393	.35	----	.25	----	----	----	----	--------	--------
60	Lyon, Rock Rapids	23,000	20,887	.50	.25	.25	----	.25	----	----	9,855	--------
61	Mahaska, Oskaloosa	55,232	48,116	.50	.25	.25	----	----	.50	.75	16,525	11,017
62	Marion, Knoxville	16,000	14,565	.50	.25	.25	----	.25	.35	----	5,964	3,667
63	Marshall, Marshallt'n (Fair)	56,523	45,117	.50	.25	.25	----	.25	----	----	10,272	8,257
64	Marshall, Marshallt'n (Con.)	2,300	--------	----	----	----	----	----	----	----	--------	--------
65	Mills, Malvern	15,000	12,000	.75	.35	.25	----	----	.35	----	4,000	--------

TABLE NO. 4—Continued.

Number	County and City or Town	Total attendance	Total paid admissions	Outside Gate Admissions			Grandstand					
				Adult	Vehicle	Children	Admissions				Total day admissions	Total night admissions
66	Mitchell, Osage	12,247	11,376	.50	----	.25	----	.25	----	----	2,167	974
67	Monona, Onawa	4,227	4,227	.50	----	.25	----	.25	----	----	2,413	334
68	Monroe, Albia	13,215	13,003	.50	.25	.25	----	.25	----	----	5,356	3,859
69	Muscatine, West Liberty	46,865	34,235	.50	.50	.25	----	.25	----	----	11,759	7,805
70	O'Brien, Sheldon	22,460	20,639	.50	----	.25	----	.25	----	----	5,769	3,142
71	Page, Clarinda	20,000	15,263	.75	.25	.25	.15	.25	.50	----	4,699	4,029
72	Page, Shenandoah	12,000	11,291	.75	.35	.35	.15	.25	----	----	2,862	--------
73	Pocahontas, Fonda	6,000	5,500	.75	.25	.35	----	.25	----	----	800	--------
74	Pottawattamie, Avoca	11,706	10,413	.50	.50	.25	----	.25	----	----	2,341	--------
75	Poweshiek, Brooklyn	4,000	----------	----	----	----	----	----	----	----	--------	--------
76	Poweshiek, Grinnell	16,918	12,304	.50	.50	.25	----	.25	----	----	4,317	5,261
77	Poweshiek, Malcom	2,092	2,092	.50	.25	.25	----	.25	----	----	903	--------
78	Ringgold, Mount Ayr	8,000	----------	----	----	----	----	----	----	----	--------	--------
79	Sac, Sac City	12,019	12,019	.75	.25	.25	----	.25	----	----	3,938	2,730
80	Scott, Davenport	102,642	100,838	.50	.50	.25	.50	.75	1.00	1.50	30,965	18,219
81	Shelby, Harlan	10,000	6,975	.50	.50	.35	----	.25	----	----	2,541	--------
82	Sioux, Orange City	10,491	10,491	.50	.50	.35	.15	.25	----	----	2,000	1,600
83	Story, Ames	10,061	8,061	.50	.25	.25	----	.25	----	----	--------	1,400
84	Tama, Toledo	10,925	10,613	.50	.25	.25	----	.25	----	----	2,876	--------
85	Taylor, Bedford	14,000	12,800	.50	.25	.25	----	.25	----	----	3,036	500
86	Van Buren, Milton	5,000	4,500	.50	.50	----	----	----	----	----	--------	--------
87	Warren, Indianola	14,814	14,296	.50	.25	.25	.15	.25	----	----	6,345	2,550
88	Wayne, Corydon	38,000	19,286	.50	.25	.25	----	.25	.35	.50	10,000	4,800
89	Webster, Fort Dodge	64,386	34,810	.75	----	.25	.25	.50	.75	1.00	21,008	8,828
90	Winnebago, Forest City	10,000	9,557	.50	.25	.25	----	.25	----	----	2,757	2,109
91	Winneshiek, Decorah	25,000	22,500	.75	----	.25	----	.25	----	----	2,200	1,200
92	Woodbury, Sioux City	95,313	95,313	.50	----	.25	----	.50	.75	1.00	30,787	10,491
93	Worth, Northwood	9,000	6,000	.50	.25	----	----	.25	----	----	1,000	--------
94	Wright, Clarion	13,046	13,046	.50	.25	.25	----	.25	----	----	2,096	1,248
33a	Dickinson, Milford	8,500	----------	----	----	----	----	----	----	----	--------	--------
	Totals 1920 (95 Fairs)	1,814,533	1,456,755	----	----	----	----	----	----	----	443,147	209,745
	Totals 1919 (93 Fairs)	1,580,643	1,506,079	----	----	----	----	----	----	----	362,587	160,135
	Totals 1918 (89 Fairs)	1,150,461	910,349	----	----	----	----	----	----	----	266,661	75,795
	Totals 1917 (93 Fairs)	1,345,259	1,094,968	----	----	----	----	----	----	----	270,991	91,766
	Totals 1916 (99 Fairs)	1,272,479	991,057	----	----	----	----	----	----	----	279,714	66,600
	Totals 1915 (93 Fairs)	1,115,605	838,047	----	----	----	----	----	----	----	--------	--------

Admission Fees Paid	$1.50	$1.00	75 cents	65 cents	50 cents	40 cents	35 cents	27 cents	25 cents	15 cents	10 cents	No charge
Gen. admission, outside gates:												
Adults	----	----	13	2	73	----	2	----	----	----	----	4
Vehicles	----	----	----	----	26	----	6	----	49	----	----	13
Children	----	----	----	----	1	----	6	----	71	----	----	16
Grandstand admissions	1	6	5	----	11	1	10	1	69	11	2	8
Quarterstretch admissions:												
Persons	----	----	----	----	1	1	1	----	39	1	----	51
Vehicles	----	1.00	----	----	----	----	----	----	11	----	----	82

IOWA STATE FAIR

True to form, the Iowa State Fair again set a new record for the agricultural and live stock expositions of America to strive for at its sixty-sixth annual exposition at Des Moines, August 25 to September 3, 1920.

The great agricultural regions of the central west had practically recovered from the war and, as a result, exhibits in all departments of the monster exposition were crowded as never before. In the swine department, the entries were so numerous that 502 temporary pens had to be arranged to take care of the overflow exhibit. Both in quantity and quality, the exhibits in all of the live stock departments in 1920 surpassed by far all previous records established at the Iowa State Fair.

The swine department showed the greatest number of animals on exhibition. There were 4,036 head of hogs of the ten breeds exhibited as compared with 3,197 in 1919. Duroc Jerseys headed the list in point of numbers with 1,206 head. The cattle department was given a tremendous impetus by the completion of the new permanent cattle barn just before the opening of the 1920 state fair. Some of the finest herds in America were brought to Des Moines to compete with the entries made by Iowa breeders. A total of 1,169 head of cattle were on exhibition during the 1920 fair. This is 156 head more than were exhibited at the 1919 fair. The exhibits were made by 278 individual exhibitors.

The horse breeders of the Middle West staged a come-back, which was reflected in the 1920 horse exhibit at the state fair, where 119 exhibitors showed 751 head of horses, ponies and mules. The 1919 record for the horse department was 472 head shown by 97 exhibitors. There was a similar increase in the showing made by sheep breeders, mainly from Iowa. They exhibited 938 head of sheep as compared with 784 head in 1919. The goat exhibit consisted of 35 head compared with 71 head a year ago.

The post-war revival of the manufacturing industries which cater to the agricultural field was also reflected in an unprecedented display of farm machinery of every type. The exhibits not only occupied every foot of available floor space in the large exhibition halls but the heavy machinery filled every available foot of outside space, and, in fact, overflowed and occupied a block of ground which heretofore had been occupied by concessions. It was very evident that arrangements must be made in the near future to provide more outside space for heavy machinery exhibits.

One of the outstanding features of the machinery exhibit was the motor driven and motor drawn vehicles and implements. For the convenience of the dealers, the passenger car and truck exhibit was combined and occupied 70,000 square feet of floor space in machinery hall.

The outstanding features of the agricultural exhibit which completely filled the agricultural building were seventeen county exhibits staged by the county farm bureaus and thirteen individual farm exhibits. These exhibits covered a wide range of products and were arranged in an attractive manner.

One of the features of this year's fair, which is entitled to special mention, is the junior department which was practically a complete fair in itself. The boys and girls of Iowa, who are doing club work, are entitled to praise for the showing made. In the live stock departments, 122 boys and girls exhibited 140 head of baby beeves; 167 boys and girls exhibited 310 pigs; 3 boys and girls exhibited 6 sheep; and 150 boys and girls exhibited 459 birds in the poultry department. In addition to these exhibits, the State College Building, which was set aside for the boys and girls club work this year was well filled and demonstrations by teams representing the different counties were staged daily.

The total attendance for the ten days of the fair was 383,836. This was 24,311 less than the total for 1919. This small slump in attendance was due to the weather conditions after Monday of the second week, and partly to the shortage of labor, high prices and similar factors which led many persons to forgo a vacation trip during 1920. The attendance figures show that up until Monday night, August 30, there was an increase of 16,125. During the balance of the week, however, the weather was not favorable. Considerable rain fell in the territory surrounding Des Moines which made the roads almost impassable. The mornings were cloudy, accompanied by a slight, drizzly rain. In other words, it was just the kind of weather that would discourage fair visitors from making a fifty or hundred mile automobile trip, and, on the other hand, not enough rain fell on the fair grounds to interfere with the carrying out of the complete program until the last day of the fair, when there was a heavy downpour and the management found it necessary to call off the night show and release exhibits and throw the gates open at four o'clock instead of at ten as had been planned.

Tuesday was the largest day of the fair, showing a total attendance of 67,170. The grand stand crowds were large every day of the fair. In most instances, the evening attendance was in excess of the afternoon. The largest evening crowd for the grand stand was 19,119 on Monday. The largest afternoon crowd was 15,659 on the opening Friday.

It is the general observation that the visitors during the first two or three days of the fair come largely from the territory immediately around Des Moines, while those coming later in the week are from the more distant parts of the state.

The attractions which appeared daily in front of the grand stand were among the biggest drawing cards for the fair. The same slight decrease in attendance which was marked in the general admissions was also noted in the grand stand crowds. There were 84,090 day admissions in 1920 as compared with 91,017 in 1919, and 77,542 night attendance for 1920 as compared with 108,634 in 1919, the Friday night performance being called off on account of rain.

The need of additional seating capacity in the grand stand to accommodate the crowds was emphasized practically every day of the fair. The seating capacity of the grand stand and bleachers is approximately 12,000. There was hardly a day or evening performance at which the crowd was not in excess of this.

The tremendous drawing power of the live stock and horse show given during the evening in the stock pavilion was clearly demonstrated during the 1920 state fair. These shows attracted a total attendance of 11,135 in the five nights. Standing room was at a premium practically every evening during the progress of these events.

One of the outstanding features which served possibly more than anything else to draw the finest of the country's live stock and agricultural products to the Iowa State Fair was the greatly increased list of premiums offered and paid. A total of $112,620.15 was paid in premiums in all departments of the fair this year. This is an increase of $27,081.84 over 1919 and is considerably larger than the premiums paid by other state fairs. That the increase in premium offerings was well worth while is clearly shown by the remarkable development in the quality of exhibits and the increase in the number of exhibitors noted at this year's state fair. Detailed tabulations covering the attendance, number of entries, premiums paid and comparison between the 1920 fair and previous fairs are contained elsewhere in this report.

One of the greatest features of interest to live stock breeders at the 1920 Iowa State Fair was the newly completed cattle barn and sale pavilion. This barn is the largest of its kind in the country and the sale pavilion, which will be finished January 1, 1921, promises to make the Iowa State Fair grounds the live stock sale center for this part of the Middle West.

The barn is of steel and brick construction. The outside dimensions are 325 feet by 450 feet. This monster structure provides stalls for 1,520 head of exhibition cattle, sleeping quarters for herdsmen, offices for superintendent and assistants, and ample shower baths.

Special consideration has been given to light and ventilation. Judges at the 1920 State Fair pronounced it practically ideal from this standpoint. In the housing of the cattle, there are practically no obstructions to break the view from one end of the building to the other. This gives exhibitors locations which are equally accessible to the general public. The wide aisles do away with much of the congestion which is common in many show pavilions at the larger fairs. City water is carried to all parts of the building and is connected with an elaborate drainage system providing for perfect sanitation.

The sale pavilion which is to be completed by the first of the year is looked upon by experts as a model. The sale ring has a seating capacity of 1,000 and is free from obstruction of any kind. It is heated and ventilated by a fan system which forces in fresh warm air and draws out the foul air at the same time. For the convenience of breeders special wash racks with hot and cold water are provided. This makes it possible to have all stock properly groomed before it goes into the sale ring.

Ample office room is provided in the west end of the building. To the right of the entrance there is a large dining room with a fully equipped kitchen. This is designed to accommodate not only the herdsmen but also persons coming to attend the sales. Above the office, dining room and main entrance are sleeping quarters for the men in charge of the stock during the sale and for the assistants in the cattle department during the state fair. Care has been taken to provide equipment which will insure the adequate heating of these quarters in the coldest weather.

The barn and sale pavilion, when present contracts are completed, will cost $204,000.00. One hundred and fifty thousand dollars of this amount was made available by state appropriation of the Thirty-eighth General Assembly. The balance, $54,000.00 has been advanced out of the surplus of the 1920 state fair.

In order to give a clearly, unbiased report of the entire fair for 1920, there is submitted in the following pages, a group of articles collected from the leading agricultural and live stock journals of the Middle West. The reports printed by these journals are prepared by their most experienced writers, all of whom are authorities in this field.

AMERICA'S FOREMOST FARMERS' FAIR.

From The Breeders' Gazette, Chicago, Ill.

INDUSTRY, ORGANIZATION, WEALTH, ACHIEVEMENT.

These fundamentally interlocking words spell Iowa, as, magnificently arrayed in the majesty and grandeur of gala attire, donned in honor of a public occasion, this opulent Ceres stood in an attitude of triumphant self-revealment in her capital city of Des Moines last week.

That is one way to introduce the goddess. It may be worse than it sounds. This alleged writer lay awake all night on a Rock Island train trying to phrase it. The result is wholly unworthy of the splendid sight which inspired his audacity. He may lose his job for printing it, for a report of an agricultural exposition never was begun, although one might be finished, on a Rock Island train. He has deliberately and somewhat laboriously detoured for a moment out of an old reportorial rut because there never was a state fair like Iowa's. What is more, there never was a state, and there is no state, like Iowa. Illinois, Indiana, Ohio, Minnesota, Nebraska and the rest cannot justifiably take offense at this statement. It is entirely free from intended comparisons, odious or otherwise. Iowa is incomparable; so is its fair. Most of Iowa's land surface assays pay dirt. It is a farming state in a favored climatic zone, inhabited by people who, in any other state, probably would not think clearer or farm any better than their neighbors. It is hard to farm unprofitably if one farms at all in Iowa. A land that makes prodigious quantities of meat and milk must make money. Iowa is a granary, meathouse and creampot. Nevertheless, some of its farmers, presumably unable to endure prosperity, have gone to Canada or elsewhere, to learn, we fear, that values are rarely appreciated until they have slipped out of one's possession.

Iowa has seldom been fatter and finer than it is now. This is the big, obvious fact illustrated and advertised by its sixty-sixth annual fair. The fair grounds, buildings and equipment proclaim the state's affluence. Since 1885, when the fair was permanently located in Des Moines, the state has invested $530,611 in improvements. The real estate, comprising a 360-acre tract, is valued at $582,000; it is worth a million. The buildings are appraised at $687,764, to which must now be added $200,000, invested during the past year in the largest and best appointed cattle barn on an exhibition grounds in America or elsewhere. The present grand total assets of the fixture approximate $2,500,000, and for every dollar that the state has spent on the grounds it has several dollars' worth of first-class property.

The new cattle barn, of brick and steel construction, cost $200,000; it will accommodate 1,600 head; 1,400 occupied it last week. When completed, according to the architects' plans, a large sale ring, costing $27,000, will be one of its unique and valuable features. Beef cattle were stalled in one section of the imposing structure, and dairy cattle in another. The building is admirably lighted and ventilated, conveniently located in relation to the big coliseum, and cattle exhibitors appreciated and praised it as meeting every practical requirement.

Iowa's dairy industry rapidly is expanding, due to the growth of the state's cities and towns, and the remarkable development of its manufacturing industries. The gradual urbanization of the nation's chief agricultural state is inevitable. Hence the increasing demand for local dairy products; hence the urgent need on the fair grounds of an exhibition building worthy, in size, appointments and appearance, of that essential industry in Iowa. The building, according to tentative plans, will house a dairy machinery show, in addition to a model creamery and an ice cream factory, which will demonstrate the commercial processes of producing butter and cream.

A commodious building for fruits, vegetables, plants and flowers also is required for the profuse and excellent displays which growers of these edible and decorative bounties of the soil are eager to make at the fair. A 50 per cent increase in the capacity of the grandstand would pay for itself within a few years. All the seats in the present grandstand were sold every day or evening during the week at 50 and 75 cents each and $1 each (for boxes). Eventually a big general exposition hall will be built. If the grandstand is moved, as it is likely to be when enlarged, 8 to 10 acres of needed open space for exhibits and parking will be added. The existing arrangements of the grounds make this valuable land practically useless to the fair.

Live stock thrives and is raised most extensively and profitably where feeds are regularly and abundantly grown. Iowa is therefore a leader in meat production. For the same reason its show of home-raised live stock at the fair is more extensive than that seen at any other state fair. This year 1,400 beef, dairy and dual-purpose cattle, 4,500 hogs, 1,000 sheep and 900 draft and light horses, ponies, jacks and mules were exhibited, breaking all state fair records, as regards numbers, and measuring up to the highest standard of average excellence. Most of the live stock was bred and raised in Iowa, and most of the prizes were awarded to Iowa exhibitors, despite the fact that outstanding show herds, flocks and studs from many other states introduced the stiffest kind of competition. The judging throughout in this department was as competent and satisfactory as we have ever had at a live stock show. The superintendents did their work excellently; the judging schedules were followed systematically and dependably; exhibitors were dealt with by men who understand their special problems; the public was given every opportunity of studying the live stock exhibits.

The official catalog of the entries was prepared at a big expense, but it was invaluable to all interested students of the show. We have not seen so complete, accurate and useful a catalog at any other state fair stock show. We commend it as a model to state fair managers.

Agricultural machinery and automotive exhibits were almost infinite in variety, and occupied, in the machinery hall and outdoors, more space than has ever before been asked for by manufacturers and dealers. Much more space was applied for than could be supplied. It was a stupendous showing, overflowing into other sections of the grounds hitherto reserved for other concessionaires.

It was too early in the season for a representative display of farm crops, but seventeen counties made individual composite exhibits indicating the quality and wide variety of agricultural production in Iowa. Polk county won the sweepstakes prize.

Boys and girls, who are members of baby beef, calf, pig, sheep and other clubs, were enthusiastic participants in many contests, won many cash prizes, and, under organized direction, learned much about every section of the big fair. More than 180 boys were in a camp on the grounds during the week. Farmers' wives and daughters were appealed to by many kinds of instructive, practical and entertaining exhibits, lectures and demonstrations. The principles and practice of social and personal hygiene were graphically presented. After seeing the sideshows, many of which were disreputable and disgraceful, a self-respecting and sensitive visitor would be doubly thankful for the hope of race improvement held out by the lecturers on hygiene, baby health and related subjects. Science and common sense blacklist unsound animals for breeding purposes, but sentiment and dogmas are standing in the way of their application to the human race.

Despite threatening weather every day, and showers on Wednesday and Thursday, the total attendance for the week was 380,000; last year it was 408,147. The total receipts this year were $400,000, and profits $80,000.

THE HOG SHOW.

Four thousand hogs proved too many, even for the big Iowa hog barn. Two large tents covered overflow pens, while a third tent housed all the pig club entries. Thus did the state demonstrate the tremendous interest now being taken in pure-bred hogs. The usual plentitude of sale stock abounded, and by its presence not only lowered the standard of the show, but worked a hardship on breeders who were there primarily to show, and they were cramped in the space allotted to them. The entries included 1,139 Duroc Jerseys, 787 Chester Whites, 738 Poland Chinas, 642 Hampshires, 172 Spotted Poland Chinas, 90 Berkshires, 70 Tamworths, 48 Large Yorkshires and 310 pig club pigs.

THE PIG CLUB EXHIBIT.

The swine show staged by the junior farmers of Iowa was from the standpoint of numbers and quality one which has been unequaled in former years. Approximately 150 boys and girls from twenty-three counties showed 310 pigs—four times as many as were at the 1919 Hawkeye State Fair. With a pig club in practically every county in Iowa, a large exhibit and keen interest were assured. One of the factors which contributed to the large numbers shown was the prize money offered for county exhibits. The award for county exhibit was based on number of pigs shown and winnings won by the individual counties. At least ten pigs had to be shown in order for a county to qualify. Ten counties qualified. Crawford was the banner county, winning on the basis of 59 pigs shown, and winning 21 ribbons. Cass county was a close second, with 56 pigs and 21 ribbons, followed by Marshall, a close third.

THE SHEEP SHOW.

The sheep show was better than ever. The Shropshire, Oxford and Hampshire breeds were especially well represented, being almost on a par as to number of entries. Although the individuals were quite good in type, many lacked showring condition. One of the most encouraging things about the show was the fact that a large percentage of the sheep were bred in Iowa, and were shown by sheepmen showing for the first time. This speaks well for future sheep shows in Iowa.

THE HORSE SHOW.

One of the departments which achieved a brilliant success and proved extraordinarily popular was the horse show, and the display of light horses and ponies in the various saddle and harness events. Dean C. F. Curtiss, superintendent of the horse department, took this in hand several months ago, giving it his special attention, and with the gratifying result that the pavilion was filled to overflowing at every session, and the ticket sellers were obliged to cease selling standing room and general admission, on account of the congestion around the ringside, all of the reserved seats for all of the sessions having been disposed of early in the week. Not only were the audiences of standing-room-only capacity, but they were also demonstratively enthusiastic in their enjoyment of the various contests. A remarkable list of entries had been received. There were five high-class tandems and four fours-in-hand in each of the road and park divisions; there were eighteen contestants in the $1,000 stake for five-gaited saddle horses and fourteen contestants in the three-gaited stake of the same value. These figures are remarkable and significant in these days, especially in connection with the harness horse department. It is to be recalled also that the Iowa State Fair was held at the same time as that of Wisconsin. It was also contemporaneous with the big show given at the Ohio State Fair, and the future routes of some of the stables made the Columbus event more accessible than it would have been for them to have gone to Des Moines.

IOWA'S GREATEST FAIR AND EXPOSITION.

From The Iowa Homestead, Des Moines, Iowa.

Bigger and better than ever, marvelous in the extent and quality of the exhibits in every department, the greatest educational institution in the state for the farmer and those indirectly interested in agriculture, an advertisement unequaled in its power to portray the resources of a great state, an agricultural and live-stock exposition such as has never been staged by any other state. These and many other descriptive terms were freely employed by visitors to describe the Iowa State Fair, held at Des Moines, last week. There was scarcely a department of this great institution that did not exceed in size and educational value corresponding departments of former Iowa State Fairs.

The fair management, who had been working industriously for twelve months to make the 1920 show an outstanding success, succeeded far beyond their own expectations in getting together the splendid exhibits. They deserve nothing but praise for their faithful work and well-directed efforts. The people appreciated the program that had been mapped out for them, as evidenced by their interest in the various departments. The weather was fine during the whole period except on the last day, when rain cut the attendance to some extent. On Thursday morning, however, weather conditions looked somewhat threatening, and that no doubt kept a good many persons from coming to the fair.

The attendance was 380,990 as compared with 406,100 a year ago, and showed a falling off of 25,210. Receipts, however, were larger than last year owing to charging 75 instead of 50 cents for admission to the grounds and also a larger fee for grandstand admission. While an exact accounting has not been secured up to date, it is generally considered that the fair association made a profit somewhat in excess of $75,000. Part of the profits will be used to help pay for the new cattle barn and part will be devoted to grading and graveling of the roads on the grounds.

The farm machinery display was about of normal size as compared with former years. Most of the well-known makes of tractors were on exhibition and it was evident, even from a rather cursory glance at the different models, that improvement in design and construction is still going forward. The tendency is toward enclosed gears running in oil and more durable construction. The tractor is undergoing improvement from year to year just as the automobile did in its early history and as a result is gaining in efficiency. A number of motor cultivators were also shown; they are gradually gaining in popularity, but are not being introduced as rapidly as tractors and trucks. No doubt the day is coming, however, when greater interest in them will be manifested by the farmers.

Electric farm lighting plants were well displayed in many tents and, judging from the interest shown in them, they appeal very strongly to the farmer and especially to his wife, who gave a lot of attention to the accessories that were exhibited in connection with these plants. Thousands of women cast longing eyes at washing machines, irons, mangles, vacuum cleaners, etc., that were run by motors operated by electric current produced by these farm lighting plants. Most electric plants, if used for operating pumps, washing machines, grinders and other machines, actually furnish all the light needed on the farm as a by-product. Different sized plants were exhibited by half a dozen or more manufacturers, some of which were capable of developing considerable power.

Several makes of milking machines, which, by the way, are being improved and simplified from year to year, were shown and attracted a great deal of attention from farmers. Mechanical milkers are making a stronger appeal to farmers as help becomes scarcer. Perhaps no labor-saving machines are selling better at this time than mechanical milkers. They rob dairying of one of the most laborious and least-liked tasks connected with the industry—milking by hand. Those who have used mechanical milkers for a year or so, especially in recent years, often declare that they would give up dairying if they had to go back to hand milking, which is about as good a recommendation as a manufacturer could ask for a machine of that sort. Up-to-date barn equipment—stalls, stanchions, feed troughs, manure and feed carriers, ventilating outfits, etc., were much in evidence and received a great deal of attention from farmer visitors.

The usual line of farm machinery, including tractor implements, was in evidence. Silos built of different materials, silage cutters, silage distributors and other machinery used in connection with silos were well displayed, as were also manure spreaders, straw spreaders, threshing outfits and all kinds of harvesting machinery. The whole machinery display emphasized the great progress agriculture has made in the last quarter of a century due to improved machinery. It reminded one of the gloomy pictures many so-called economists often paint when quoting figures to show that rural population is not increasing so rapidly as city population. They often view with great alarm the fact that in some rural sections the number of persons has actually decreased while a great increase in city population has been made in the same territory. It seems strange to us that these economists forget to call attention to the fact that in spite of the great discrepancy in the increase in city as compared with rural population, total agricultural production is increasing from year to year. No one need have any fears about the people in this country going hungry for lack of food production during the next 50 or 75 years so long as prices of farm products remain profitable to the producers, for much of our land can easily be made to yield 50 per cent more than it now produces and a great deal of land which now practically produces nothing can be made to yield big crops.

Self-feeders for hogs, poultry, etc., were much in evidence, as were other labor-saving devices used for both these classes of stock nowadays. Collapsible hog houses that can be shipped in manufactured form direct to the farmer were shown by at least one manufacturer who is doing a big business with hog men because he is able to sell one of these houses and deliver it to the farmer for less than it would cost the latter to buy the lumber required to make one. Cattle and hog waterers in which the water can be kept warm in the coldest weather in winter by means of kerosene lamps attracted a great deal of attention, and the manufacturers of these products made a large number of sales notwithstanding that money is hard to get for most things at this time.

A very impressive lesson was presented by the cow-testing exhibit in the new cattle barn, which was put on by the dairy husbandry department of the Iowa State College and the state board of agriculture. The exhibit consisted of ten grade Jersey and Guernsey cows from the herd of Joseph Geraghty & Sons, McGregor, Iowa. It taught two lessons: First, the effect of rational or scientific feeding upon milk production; and, second, the effect of using registered sires in herd improvement, so far as it relates to production. Complete annual production records were shown for six cows that had been under test for two consecutive years. The cows varied in age from four to seven years. In 1919, when no special attention was being paid to furnishing a well-balanced ration, the average production for the six was 5,814 pounds milk and 304 pounds fat; in 1920, when the cows were fed a proper dairy ration according to their capacity to handle feed, the average production per cow was 8,133 pounds milk and 448 pounds fat. In other words, the same cows with improved methods of feeding produced 2,319 pounds more milk and 144 pounds more fat per year than when indifferently fed.

While stockmen were studying type and quality of high-class, pure-bred beef cattle in the judging ring and many were making mental notes of the improvement they might effect in their cattle at home by breeding to a first-class registered sire or by adding one or more registered females to their grades and eventually building up registered herds, one of the big packers displayed the carcasses of two steers in papier mache —one of a pure bred and the other a grade. These two steers were also displayed in stuffed form as nearly like the animals as the best taxidermists could represent them. The pure-bred steer, Buster, was the grand champion steer in the junior feeding contest at the 1919 International, which was fed for that show by Miss Clara Ray, Mellott, Ind. The scrub steer, Mike, came from a corn-belt feed lot where he had been fed for a period of 80 days and carried about as much flesh as a steer of that kind can be profitably made to carry. The 19-months-old Buster weighed 1,270 pounds when slaughtered in Chicago, while the four-year-old Mike weighed 1,165 pounds when he was slaughtered on the same day.

The object of the exhibit was to show which type of steer will make the most economical gains and why a well-bred steer brings a higher price on the market than a scrub. Object lessons of this sort that tell the truth are invaluable to the stockman who has not yet learned to appreciate the full value of improved blood in live stock.

The county exhibits, of which there were 17 in the agricultural building, created greater interest than usual, judging from the attention they received from the visitors. The exhibits were exceedingly attractive and also very representative of the counties, inasmuch as each exhibit had been gathered from at least 40 farms in the county it represented. The grains, forage crops and grasses, the products of the orchard and the garden were all of high quality and the arrangement of the exhibits, while quite similar, were varied enough to be interesting and attractive as well as educational.

For the purpose of judging the exhibits the state was divided into four districts—the northern, north central, south central and southern. The fair association set aside $1,200 in cash for each district to be divided pro rata by each county in the district according to the score made. To these sums the State Farm Bureau Federation added $50 in cash for each district, thus giving each district $1,250.

Thirteen individual farm exhibits added much to the appearance of and interest in the agricultural building. The exhibits were very attractively gotten up, the products represented were varied and of the very best. Thirteen farms were represented. For the purpose of awarding prizes equitably the state was divided into four sections as for the county exhibits, with Polk county forming a fifth section by itself.

Under the grandstand the Iowa State College had a number of highly interesting and educational exhibits. Among them was one that attracted a great deal of attention—that made by the soils section. On a large map of Iowa which hung on the wall, information was given in regard to the progress of the soil-mapping work which is being carried on in different counties of the state under the supervision of Prof. W. H. Stevenson. Maps showing soil surveys covered the 33 counties that have been surveyed. The number of counties that have asked to have their soils mapped as soon as possible were also indicated.

After a county has been surveyed, fertilizer tests are conducted on some of its principal soil types with a view of determining how the fertility may be most economically maintained and also which kind of fertilizer should be used. The result of some tests that have been made in different counties were shown in crop yields. On a Henry county Grundy silt loam, for example, larger and more economical returns were secured with corn where the soil had received manure and rock phosphate than where manure and acid phosphate had been added. On the same soil where crop residues were added instead of manure acid phosphate proved more profitable than rock phosphate. The result of a number of other tests were explained by H. J. Harper, the young man who had charge of the exhibit.

Hog feeding experiments was one of the special features of the animal husbandry booth of Iowa State College. An experiment at the college, wherein corn substitutes were used for fattening hogs, was featured. The result of this test, where 125-pound hogs were fed on tankage, salt, corn and corn substitutes, showed that the substitutes would have to be purchased at lower prices than they sell at now in order to be profitable. The value of corn substitutes compared with corn, as determined in this experiment, is indicated in percentages as follows, considering corn as 100 per cent efficient: Corn, 100; barley, 76; kafir, 77; milo maize, 94; ground oats, 61; rye, 89; wheat, 97 per cent.

Another experiment was featured on charts in which 22 lots of hogs were fed—19 of them on commercial feeds, two check lots on corn and one on a mixed ration. All the pigs ran on rape throughout the period of the test and the returns showed that, with the exception of a bare advantage in the lot of hogs which were fed hominy, more economical gains from the standpoint of feed required for 100 pounds of gain were made by feeding corn with tankage or other proper supplement. This test is not taken as absolutely conclusive on all points, hence a similar test is again in progress at the experiment station.

"There are no substitutes for dairy products and healthy children," was one of many terse statements found about the booth of the Iowa Dairy Council, which did its best to advertise the food value of dairy products and the growth-promoting principles—vitamines—contained in milk and fat. The function of the Iowa Dairy Council is to aid the dairy industry of the state by stimulating the demand for dairy products by teaching the public the desirability of drinking more milk, eating more butter, cheese, etc., because of their wholesome qualities and because of the growth-promoting principles which they contain and which are of special value to children. Another feature in this booth was the display of a large bottle made of wood and shaped like a milk bottle. The bottle was painted to appear to contain milk with cream risen to the top. At the cream line of the bottle, which slowly and constantly revolved on a pivot, were painted in bright colors many happy and healthy appearing children. Just above these pictures of children was printed, "The healthy child is the cream line of a nation," thus forcibly impressing upon the public the importance of feeding the children an abundance of milk from healthy cows.

Adjoining the exhibits mentioned above was one of the state dairy and food commission, calling attention to the work of the commission in protecting the public against adulterated foods and seeing to it that all weights and measures in retail establishments are maintained up to standard.

Apples! Apples! Apples! A whole department full and running over of the best apples ever shown at the Iowa State Fair was a feature in the agricultural and horticultural building that should not be underestimated. Orchardists are getting down to business in growing fruit and the apples shown this year demonstrated this fact quite conclusively in that the product was free from blemishes and worms. It so happens, also, that the fruit has much better color this year than usual, partly due to a favorable season and partly to better care. The quality of the Iowa apples shown this year could not be excelled or even approached by the western commercial fruit growers, a point which the latter are willing to concede. Surely Iowa is prepared for commercial fruit growing and with continued attention to the best methods of spraying, pruning and feeding the fruit trees, a great industry can be built up in the state.

The box exhibits of apples were especially attractive and, aside from illustrating the market grades and pack, indicated the quality of Iowa apples. More than 20 exhibitors had entries of such numerous kinds and varieties of fruit that they covered large tables. Growers have had especially good success with the Wanetta plum, a new variety that is a cross between the American and Japanese. This plum is as good in flavor as the California plum and is shipped into the Middle West; it is also hardy and a good quantity producer.

One exhibitor had an attractive display of 41 varieties of grapes. There were 30 entries in competition for the premiums on ornamental gift baskets of fruit and most excellent taste was shown in the arrangement of these baskets. Another feature included in the department this year was a stand where visitors, who wished, might buy small or large quantities of Iowa fruits of the same quality as those exhibited for prizes. More than 12 bushels of apples were used in making a reproduction, that stood 10 feet high, of the Campanile, Iowa State College.

E. M. Reeves, Waverly, who has been in charge of these exhibits for the last 14 years, is to be congratulated on the many attractive features of the department. The fruit industry in the state is growing so in importance that more room is needed for display at the fair in order to keep pace with the development throughout the state.

There were 365 boys and girls enrolled at the boys and girls' camp at the fair this year either as exhibitors or demonstrators and, together with the 126 members of judging teams who occupied the camp for a part of the time, they filled the two large domitories that had been provided by the state fair board. Aside from the baby beef-feeding contest, in which there were more than 171 entries, and the pig-feeding contest with 305 entries by club boys and girls, the boys' activities included team judging of live stock, corn crop exhibits, spraying club work and garden work. Twenty-five judging teams were entered in the live stock contest and the Boone county team carried away first honors, which entitles them to a free trip to the Interstate Fair at Sioux City, where they will represent Iowa in competition with club teams from 12 other states, and also to the International Live Stock Show at Chicago this fall.

Girls' club work occupied a much larger place at the fair this year than ever before, for in past years it has been confined almost exclusively to canning club work. Five divisions of work were represented this year, namely, canning, clothing, food preparation for meals and arrangement and care of girls' rooms. It will be interesting to Iowa mothers to know that this new form of club work was originated in Iowa this year and is proving so practical and of so much interest to girls who are members of clubs that it is being copied widely in other states. The greater part of the week was devoted to demonstrations by teams entered for contests in the different lines of club work to the end of selecting the county team of three girls making the highest score in any line of club work.

The beef cattle show at Des Moines this year was larger and better than a year ago.

There was a fine dairy cattle show at the fair this year. It was a great deal larger than last year and perhaps not better in quality, but there was a very good show.

The horse show was 25 per cent larger this year than last. Last year the total number of horses on exhibition was 336 head; this year it was

436 and more interest was manifested in the show of equine beauties than has been the case for a number of years past.

There is nothing new in saying that Iowa is a great hog state, yet it is worth recalling that on the first of this year the bureau statistics of the United States Department of Agriculture reported 10,389,000 hogs for Iowa, or twice as many as were owned at that time in the second largest hog-producing state, Illinois. In view of this large number of hogs in Iowa, we all expected much from the hog show at Des Moines this year, but no one was quite ready to believe that 4,055 head would be shown on the grounds. This number includes the hogs exhibited by boys' and girls' clubs.

That interest in sheep breeding is on the increase was quite in evidence at the Iowa State Fair this year. There was a good representation of the leading breeds of sheep, particularly from Iowa. In fact, the sheep show was an Iowa show.

While there was an estimated decrease of 20 per cent in the poultry entries this year, the average quality in the exhibits was increased by a much larger percentage, with the result that the competition for places of all classes was very close. The reason for decreasing entries was due to the exclusion of professional exhibitors, who have brought as high as 500 to 800 fowls to the Iowa fair in other years. "Hucksters," as they are known among breeders, were discouraged this year by a ruling of the state fair board that no exhibitor could enter more than 50 birds and, as a consequence, the small breeders were greatly encouraged by reason of the better opportunity offered them and will make every effort to have the ruling on "hucksters" continued.

THE FINEST EXHIBIT AT THE IOWA STATE FAIR.

The 1920 state fair was one of which all Iowa may well be proud, and with such a wonderful collection of excellent exhibits claiming attention, it might seem a hopeless task to attempt to choose the greatest. But to my way of thinking, there was one which outclassed all others. Every person who visited the fair will testify to the wealth and variety of its attractions—to the fine assortment of grains and vegetables, the lovely display of fruits and flowers, the appetizing pantry stores, the instructive exhibits of the schools, colleges and state institutions, the beautiful works of art, the marvelous machinery exhibit and the grand collection of prize-winning live stock. But while I appreciate every department of the fair, it was not the display of Iowa's wealth and industry that pleased me most. As I gazed at the well-dressed, well-mannered folk, who thronged every part of the grounds, I felt that the finest spectacle—the prize exhibit of the Hawkeye state—was the happy, prosperous people, who had created this fair and then assembled in holiday spirit to view the work of their brains and hands.—Editorial by James M. Pierce.

THE WORLD'S GREATEST AGRICULTURAL FAIR.

From Farmer and Breeder, Sioux City, Iowa.

Nothing so marks the progress of agriculture in this United States of America as the fact that the Iowa State Fair—held this year at Des Moines from August 25th to September 3d—was the "biggest and best" that has ever been held. This statement, which may seem trite to those who read year after year the chronicles of the inspired reporter, is chiefly interesting and valuable on account of its truth. For year after year the Iowa fair has achieved new heights; each fair has actually been the "biggest and best," for all of which there is a reason.

The reason is not found in the undisputed fact that Iowa is the foremost agricultural state—although this is the main contributing cause. It lies chiefly in the fact that farming is essentially progressive in this forward-looking commonwealth. Agriculture in this great central region —which in itself constitutes the world's greatest food-producing area— is a live industry. Farmers here have not degenerated to the status of the peasant "whose shoulders are bowed by the weight of centuries." The western farmer—let us admit frankly that he is typified by the Iowa farmer—is up-and-a-coming. He is bent on living up to his highest possibilities. He is intelligent, purposeful, determined, a man among men.

This is the reason why agriculture in this region is essentially in a fluid state. Conditions are changing. The old order is passing with the light of modern researches and with the facilities for spreading abroad the information gathered, analyzed and disseminated by the farm press, the extension movement, and the farmers' co-operative organizations.

A great state fair is many things. It is a dramatic spectacle, a recreation grounds, a short course in applied farming; and it is also a record of what agriculture has accomplished up to date.

Hence, the 1920 Iowa fair was biggest and best largely because farming in this state has grown to be the biggest industry—compared with former records in this and other states. Never before has this great region come so near to the ideal of "pure-bred live stock on every farm." Never before have tillage and animal husbandry and home building and child culture and social progress been so prominent in the minds of the rank and file of those who have made Iowa famous.

Owing to this progressive spirit and to the material fact that 95 per cent of Iowa's land is arable, it is only natural that the state fair should be that which we have indicated at the top of this page—"The World's Greatest Agricultural Fair." Barney Heide, secretary of the International Live Stock Exposition, whose home is in Illinois, has said it, and he ought to be qualified to speak with authority. Neither should this comparison arouse envy in the hearts of those who live in other great agricultural states where other great and splendid records are made by state fairs.

Inasmuch as Iowa is the leading state in pure-bred live stock, it is only natural that the exhibits of farm animals should occupy a prominent —perhaps the most prominent—place in the eyes of visitors and the fair management. Through the liberality of the legislature, the cordial support of the pepole, and the sound business management of the fair officials, there have been erected on the fair grounds at Des Moines a series of buildings for the housing and display of the best in horses, cattle, swine, sheep and poultry that can be produced in this and other states.

It should be remembered that entries in the Iowa State Fair are not limited to the residents of this state. Competition is open to the world, and horses and cattle come to Iowa from Maryland and California. Livestock men say there is no show that makes such keen demands for excellence as the Iowa State Fair, unless it is the International.

The Iowa State Fair now has a handsome brick horse barn that is susceptible of enlargement by building an addition on the west as soon as this is necessary. A similar construction was made some years ago for the swine, in which department Iowa leads all other states. The sheep are housed in another modern building that has been designed for the specific purpose intended. And this year for the first time in history the beef and dairy cattle were housed in a new building of harmonious design that marks a big step towards the complete modernizing of all the fair structures. The poultry are still shown in an old building of the pagoda roof and whitewashed walls that was popular for so long with fair managers. Before many years this old wooden structure will also pass away along with a few others of the ancient type, and their places will be taken by permanent, brick, steel and concrete buildings that will not merely endure for generations, but will take on a richness and a mellowness as time passes, just as the classic architecture of Europe grows more beautiful with the ivy and moss of age.

An observing visitor at the state fair this year would have noted in the public addresses and the conversation generally a disposition to stress the importance of Iowa and of her people. This tendency—of which the reader has an example in this present screed—is not mere conceit, nor canny self-satisfaction. It is only the exuberant gratefulness of candid folks who appreciate their blessings and try to express their sentiments in words of commendation.

With this thought in mind no invidious comparisons need be made when we repeat what is apparent to all—that not even in sunny California, where so many of our rich and retired Iowans have gone to picnic for a few years—can a happier year-round climate be found than right here in this garden spot of the corn belt. The weather during fair week was reasonably propitious. Occasional light showers kept down the dust and the days were bright and sparkling with the first glint of autumn yet with all of summer's ardent glow retained. As a result of the fine weather, the good roads that we can brag about at least once a year, and the general prosperity that has attended the owners and workers of the fertile fields in this section, visitors flocked to the fair in increasing numbers.

The total attendance this year was 380,584, which is 25,601 less than the total for 1919. Rain on Monday night and again on Friday helped to cut the attendance short, but the chief reasons may be laid to the fact that last year was "Victory Fair," and that this year money is tight and people are beginning to observe more care in their expenditures. This year's fair was a greater money maker than any previous fair, and the general character and extent of the various exhibits were on the whole superior to those ever before seen.

The horse show was the strongest that has been seen for many years, indicating the renewed interest that farmers and breeders are taking in the horse as a practical power unit on the average farm. All classes were well filled, the draft breeds being especially prominent in number and quality. A total of 140 exhibitors from many states were present with an aggregate of 758 animals representing the following breeds: Percheron, Belgian, Shire, Clydesdale, roadster, saddler, Hackney, Shetland, and mules, jacks and jennets.

Notable in this department was the champion Percheron mare, Marietta, exhibited by Lakewood Farm, Rock Rapids, Iowa. James B. McMillan, manager of Lakewood Farm, during the fair sold this great mare to Springbrook Farms, Walkerville, Md., for the record price of $7,500, the highest price ever paid for a draft mare in this or any other country.

The new cattle barn was filled to capacity with the largest and perhaps the best lot of beef and dairy cattle that ever appeared at the Iowa State Fair. The wide aisles, the good overhead light, and the low partitions made a trip through this great building a pleasure and a profit to those who love good cattle and enjoy studying them. The beef classes were represented by the standard breeds that are popular in the West, the Shorthorns, Herefords, Angus, Galloways, Polled Shorthorns and Red Polled being represented by 88 exhibitors with a total of 765 animals. The dairy cattle were also housed in this building, 491 animals of the Holstein, Jersey, Guernsey, Ayrshire and Brown Swiss breeds being shown by 56 exhibitors.

Good cattle have been shown at the leading state fairs of the mid-west for 50 years or more. During that time definite improvement has been registered in individual merit—that is, the modern type of both beef and dairy cattle is a little more nearly ideal for the purposes in view. But by far the greatest progress is shown by the increasing number of breeders and the larger herds of high-class cattle produced by the older men in the business. Every year new names can be seen on the banners of those who have grown to the full stature of showmen in the ring. This is significant of the development of the breeding industry generally—the end being the disappearance of scrubs and grades which will be replaced with animals of standard breeds and these of increasing individual merit.

Over 4,000 head of swine, representing the popular breeds, were shown at Des Moines this year. The great swine building was filled, and the open pens and the judging pavilion nearby helped to care for the overflow. There were 121 Duroc breeders, 99 Poland China exhibitors, 66 Chester White men, 45 Hampshire breeders, 16 Spotted Poland China devotees, while the Tamworth, Berkshire and Yorkshire breeds were represented by six, four and three exhibitors, respectively. The swine show this year excelled anything heretofore seen at Des Moines in numbers and general interest, many new breeders appearing to compete with the older establishments for honors.

While sheep, in point of numbers, take fourth place in the estimate of Iowa farmers, there were at the Iowa State Fair 33 exhibitors who proved by the fine examples of the various breeds of mutton and wool producers, that sheep are growing in favor on the farms of this region, and that with proper encouragement the size and number of flocks will increase steadily until the lessening production on the range is offset by more intensive production on farms where sheep raising and sheep feeding should go hand in hand.

Poultry enthusiasts—and every poultry raiser is an enthusiast—found all they could desire in the very creditable exhibit of fowls of all grades, breeds and classes in the poultry building on the hill. Tagging all pens and coops with the name, age and sex of each bird enabled the casual visitor to study with accuracy the distinguishing marks and characteristics of the different kinds of chickens, geese, etc., that were on display.

Special days were given over to the American Legion, the old soldiers, the farm bureau, the boys and girls' clubs, the live stock parade and the auto races, with the Sunday intervening especially devoted to a musical program.

On Thursday, September 2d, which was set apart as Live Stock Parade Day, more than 700 prize winners marched through the grounds and in front of the grandstand. That this was easily a "million-dollar parade" can be seen from the fact that values of many of these champions run into five figures. It would be difficult to find anywhere on earth a better array of live stock of high character and breeding.

Farm Bureau Day was Monday, August 30th, and interest in this movement was illustrated by the attendance on that day—the largest for any previous Monday—something over 61,000 visitors being registered at the gates. It is understood that Monday will be regularly observed as Farm Bureau Day hereafter. This year members and others were favored by the presence of J. R. Howard, president of the American Farm Bureau Federation, who talked simply, but pointedly, of what the national organization has accomplished and what it hopes to do. National Secretary John W. Coverdale was also present, and notable speakers from other states contributed to a remarkably illuminating program.

There were 91 competitors in the Boys' and Girls' Baby Beef Club, and 157 in the Pig Club. In the county exhibit, in which 10 pure-bred beef heifers were shown from each county, there were 31 boys and girls entered as contestants.

RURAL IOWA ON PARADE.

From Wallace's Farmer, Des Moines, Iowa.

Why do they come to the fair?

Probably 100,000 Iowa farm people made their way through the turnstiles at the Des Moines fair grounds fair week. What drew them?

"One reason why I came," said a farmer from Blackhawk county, "was to get a real notion of how important the Iowa farmer is. In the last year some of us have been having a pretty tough time and we need to see this exhibition to bolster up our self-respect and to make us feel that we are really an essential part of the business of the country."

After a winter marked by heavy losses to all live-stock producers and a year characterized by persistent price drives on the part of the government, the Iowa farmer perhaps needed something to convince him of his own importance. From the attitude of federal and state authorities it had often seemed to him that his business was perhaps of less value than that of a two-by-four manufacturing concern in a third-rate eastern state. For a feeling of this sort, the Iowa fair, with its tremendous exhibits of all types of farm products, was a splendid remedy. The only unfortunate thing about it was perhaps that it was not possible to compel the attendance of federal officials who have been underrating the value of agriculture to the country.

For many men, however, the answer of the Blackhawk county man would be incomplete. While they come to the fair to rejoice in the exhibition of the fruitfulness of Iowa, they also come with the purpose of obtaining new ideas from the exhibits presented. The men who spend their hours at the fair in talking with progressive breeders, in investigating new types of farm machinery, or in looking over the educational exhibits of the county, state and nation, formed a large percentage of the farm visitors at the fair.

In addition to this, there was always the feeling in the air that the state fair was a time for relaxation and amusement. To many a very important part of the state fair visit was to take in the numerous amusements that were offered, to watch the races, to enjoy the evening entertainments and to make of the week a pleasant and wholesome break from the monotony of their regular work.

To all of these demands on the part of the fair visitors, the Iowa State Fair of 1920 made an adequate answer. To the farmer who was interested in noting the advance in agricultural progress, the cattle exhibits, now housed in the splendid new cattle barn, the hogs, which overflowed the hog pavilion into the several big tents, the agricultural exhibits in the various other buildings, were all a testimony to the importance of the Iowa farmer. The average farmer visitor could look at this side of the fair and in congratulating the state on its farm progress could also congratulate himself on his fortune in being a citizen of Iowa.

There was an especial product of the Iowa farm that was sure to make the visitor feel pleased with himself and with the state. This was the group of boy and girl exhibitors of live stock who attended the fair. The Iowa fair seems to be advancing to a place where it may be considered a university for the young people of the Iowa farms. Last year a good many boys and girls were housed on the grounds and were given an opportunity to learn everything possible about the exhibits at the fair. This year the number was increased, as was also the quality of the exhibits which the boys and girls were able to present. At least two large buildings were given over entirely to the housing of the boys and girls, while several rows of tents down near the gate were devoted to the overflow.

The county exhibits in the Agricultural Building were perhaps the most interesting as an indication of Iowa's development in agricultural lines. Exhibits this year were presented by more counties than last and the average of quality presented was much higher. Polk county presented the outstanding display of the 17 counties entered. This was the fourth successive year that Polk county has been endeavoring to win the sweepstakes prize and this year they were able to win both in their own section and in the state as a whole by a wide margin. Guthrie county was second, Grundy third, Clarke fourth, Cass fifth, and Warren sixth. By districts the awards were: In the northern district, Winneshiek first, Winnebago second, Chickasaw third; in the north central district, Grundy was first and Webster second; in the south central district Polk was first, Guthrie second and Greene, Carroll, Audubon and Monona followed in order named; in the southern district Clarke county won, with Cass, Warren, Decatur, Marion and Monroe in the succeeding places.

In the Iowa State College exhibits, the feature that drew the most attention was unquestionably the model farm which was laid out with real crops growing in actual Iowa dirt in the several fields. It was supposed to illustrate the arrangement of a 240-acre corn and hog farm and showed five 42-acre fields arranged with a five-year rotation of corn, oats and clover. The rest of the farm was laid out in the six acres of farmstead and four small pastures each of 4.5 acres around the barns to provide a minor rotation to furnish pasture and feed for the hogs and young stock during the summer and fall.

Another part of the college exhibit was devoted to the work of encouraging the farmer to eliminate the non-producers from his flocks and herds. A rogues gallery of photographs of poor dairy cows and chickens was on the walls and attention was called to the bad features of each. A photographic record was shown of the work of the Iowa station in building up a dairy herd from scrub cows by the use of pure-bred bulls.

The models of road building shown in the exhibit of the federal bureau of roads were especially interesting to farmers who have been discussing the question of hard roads. The making of bituminous macadam roads was shown in detail and the different type in question illustrated. Estimates of cost of various kinds of roads were quoted.

Interest in new ideas and subjects connected with the farm was not confined to the men from the country. In the Women's Building there was a very inspiring program going on all week. The program was featured by women from the country who told what they were doing in their own communities to make for a valuable social life.

To those who came to the fair to enjoy a week-long holiday as well as to those who interspersed their more serious activities with the lighter employments that the fair offered, the 1920 fair gave a splendid welcome. The daily races, the flying exhibitions, the fireworks in the evening, the orchestra concerts, even the horseshoe pitching contest, made up a program of entertainment which has not been surpassed by any previous state fair in the history of the state.

THE HAMPSHIRE ADVOCATE.

The dreams of the Hampshire enthusiasts were realized at Des Moines, Iowa, when the count of the Hampshires on exhibition at this great fair showed that there were nearly 800 on the fair grounds. This is over twice as many as have ever been at this fair before and Iowa has generally held the strongest Hampshire show in the United States. The entries in all departments of live stock exceeded those of any previous year, but we are safe in saying the Hampshires increased their entries more than any other breed. Not only were Hampshires there in number, but the quality was equally as good. It was a pleasure to attend the state fair. New cattle barns and new hog barns are all built to accommodate the stock in the best possible manner and every convenience is offered to the exhibitor. It is just and right that the great agricultural state should be represented by such a fair of far-reaching importance. However, the immense hog pavilion at the Iowa State Fair was unable to take care of the hogs shown, and several tents were filled to overflowing with the various breeds and pig club exhibits. It was also very interesting and gratifying to note some of the smaller breeders who have been showing at the Iowa State Fair for the past number of years and never showed anything with which they could win, this year succeeded in winning quite a number of the ribbons.

(Following is the report of a special committee of business men from the Tulsa, Okla., Chamber of Commerce, sent to study the 1920 Iowa State Fair with a view to using Iowa methods in founding a similar institution there.)

An investigation developed the fact that the attendance at the Des Moines fair this year runs from 68.000 to 75,000 per day; that the fair brings in annually to the city of Des Moines a minimum of $2,000,000; that it has resulted in the establishment of more industrial plants manufacturing farm implements than all other forces combined; that it has built up not only a great financial center, but an industrial and distributing center as well, and statements made by officials of the fair and officials of the city agree that the state fair has enhanced the value of the land in Iowa more than 300 per cent and that it has increased the value of the live stock of the state more than 300 per cent.

The Iowa State Fair is regarded throughout the state of Iowa as the biggest annual event of the year and the tent city in the enclosure which accommodates more than 10,000 people is the meeting point for farmers from all over Iowa and from bordering states, the people of Iowa taking their annual vacation not at the lakes or the mountains or the seashore, but at the Iowa State Fair, motoring in, renting a tent, and remaining there during the fair season.

The conclusion was reached by the managing director that a half-mile track affords much better amusement and creates more interest than a mile track for the reason that the horses are in sight at all times and people like to see them come around twice in a mile; and the fact is thoroughly demonstrated that racing without betting is not only a success, but will bring a larger attendance and a higher type of people than will racing with betting. One of the features of the fair is that thousands of men, women and children thronged what would ordinarily be the betting ring and watched the races as an amusement enterprise with an utter absence of the race horse tout, the strong arm man, the porch climber, the pickpocket and the gambler, none of these gentry being in evidence at all at the Iowa State Fair.

(The further report of the Tulsa committee concerning the tremendous effect which the state fair has in promoting the best interests of agriculture in Iowa is contained in the following article from the Tulsa, Okla., Tribune. This was written by a member of the committee immediately upon his return from the Iowa State Fair.)

By Crawford Wheeler.

There is no conflict of opinion among the people of Iowa concerning the place which the state fair at Des Moines occupies as an asset of the state. Those who know best the reasons for Iowa's leading position as an agricultural commonwealth attribute a large share of the credit to the fair.

The farmers themselves agreed with the editors of farm journals and leaders of business and industry at Des Moines that the fair is the biggest thing in Iowa. The assertion that the fair was an important factor in the increase of land values 200 per cent and in the increase of livestock values 300 per cent was backed up with statistics on the achievements of the fair during the past decade.

BRINGS FACTIONS TOGETHER.

E. H. Cunningham, secretary of the Iowa Farm Bureau Federation, hit two vital points about the mission of the fair when he said:

"It shows city people the farmers' responsibility and their place in the scheme of production more vividly than otherwise possible, and it brings the farmer in contact with an exposition of the latest machinery, the best methods, and the finest produce and live stock of Iowa's leading growers and breeders."

The fair in one aspect is a far-flung competitive market, where every variety of product and every type of machinery is on display. Twenty acres are turned over to the jobbers of tractors, engines, automobiles, silos, farm implements, lighting systems, heating plants, sewage plants, dairy equipment, and labor-saving devices for the kitchen and house. Instead of one or two machines, the farmer can see all the best makes, running in competition with each other. In one day he can survey the whole field. And he has at hand corps of disinterested compatriots and authorities whose opinion on the merits of this or that machine can be secured at once. All this means an economy of time and money to the farmer, and on the other hand the industrial concerns reap a manifold harvest of orders as the result of their display at one place during one period.

MEETING PLACE FOR FARMERS.

From another angle the fair is of even greater benefit to the rural populace. It furnishes a meeting place for co-operative organizations which can demonstrate their theories to their members through the facilities of the buildings and equipment. The annual meeting of the Farm Bureaus are held here, and national speakers address the gatherings on questions of farm labor, produce pools, loans, marketing organizations and transportation facilities. The rural editors of Iowa meet at the fair to discuss problems of journalism in their communities. The breeders or growers who specialize in one product or strain have at the fair an opportunity to exchange opinions about their one particular interest.

The Tulsa representatives ascertained the feeling of the state population by personal interviews, and farmers told C. H. Howard that the fair had meant a 25 per cent increased production to them and praised the competitive spirit which the fair had fostered. Lewis Cline obtained the same result from his queries, and he was greatly impressed with the development of the competition for boys and girls in stock raising and farming activities. D. A. Wilson made a special inquiry into the influence of the fair on horticulture and gardening. He found that the flower, seed, vegetable and fruit industries of the state had developed step by step with the fair. One concern now does a $100,000 annual business through the floral show at Des Moines. Seed houses have been equally successful.

The information gained by every Tulsan at Des Moines pointed to the prestige of the Iowa State Fair and to its place as an institution of great service. Almost every delagate gathered evidence bearing on a different angle of that service.

FINANCES

Iowa State Fair

The total receipts of the 1920 fair were $410,976.78, divided as follows: Ticket sales at outside gates, day and night grandstand, and night stock pavilion show, $270,207.25; from all other departments of the fair, $140,769.53.

The receipts from ticket sales at the outside gates increased $41,825; day grandstand, $11,715.25; night grandstand, $4,894, and the night horse show, $141.50, or a total increase of $58,573.75 in the receipts from ticket sales.

The receipts from sources other than ticket sales from all departments of the fair were $140,769.53. This was an increase over 1919 receipts of $30,828.48. The receipts in practically all departments showed an increase over the previous year. The departments that showed the greatest increases were for stall and pen rent in the horse, cattle, swine and sheep departments, $6,915; concessions and privileges, $7,577.02; machinery department, $5,970.40; forage department, $4,754.33, and the special premium money added by breeding associations and other organizations, $6,163.45. The total receipts from the fair showed an increase of $89,402.23.

The total cost of the 1920 fair was $299,287.29. The cash premiums paid amounted to $112,620.15. This was an increase of $27,081.84 over the amount paid in 1919. The total expense of music and attractions, advertising and all the other departments of the fair, except premiums, was $186,667.14. This was an increase of $23,124.95 compared with the same departments in 1919.

The surplus from the state fair amounted to $111,689.49. Deducting from the cost of maintenance of grounds and buildings, $21,470.40, leaves a net profit on the fair of $90,219.09.

IMPROVEMENT

There was expended in additions and permanent improvements to the state fair grounds and buildings during the past year, $229,415.93. Of this amount $175,993.75 was for the new cattle barn previously referred to in this report. The other improvements, amounting to $53,422.18, are set forth in an itemized statement and made a part of this report.

There was available a state appropriation of $150,000 for the new cattle barn made by the Thirty-eighth General Assembly. The cost of the cattle barn to date, over and above the state appropriation, $25,993.75, and the sum of $53,422.18 expended for miscellaneous improvements, or a total of $79,415.93 were paid for out of the surplus from the 1920 fair and the balance carried over from the previous year.

The following amounts are unpaid on contracts for the completion of the cattle barn and sale pavilion:

General contract	$ 29,325.00
Architect fees	1,000.00
Plumbing contract	310.00
Heating contract	2,125.00
Total unpaid	$ 32,760.00

The itemized statement of receipts and disbursements set forth in the following pages shows in detail the receipts and disbursements of the department and the state fair. Following the financial statement will be found comparative statements dealing with the receipts from ticket sales and from the departments, disbursements for premiums and the expense of the various departments of the fair.

ITEMIZED STATEMENT OF RECEIPTS AND DISBURSEMENTS OF THE IOWA DEPARTMENT OF AGRICULTURE AND THE IOWA STATE FAIR AND EXPOSITION FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1920.

Cash balance December 1, 1919		$ 56,140.44
Receipts from sources other than fair:		
Fees stallion registration division	$ 4,802.50	
State appropriation for cattle barn	150,000.00	
State appropriation for paving	7,826.57	
State appropriation—support Department of Agriculture	2,400.00	
State appropriation for insurance on buildings	1,000.00	
Stall rent speed barns	722.80	
Pasture rent	22.00	
Rent horse barns	60.00	
Rent from two cottages	137.00	
Rent cattle barn and sale ring	645.00	
Rent storage of machinery	392.50	
Rent poultry coops	44.00	
For labor and drayage, cattle sales	180.50	
Labor and expense 1919 National Swine Show	1,193.45	
For use of grounds, July 5, 1920	100.00	
Rent of cots and mattresses, Swine Show, 1920	230.00	
Refund on deposit for U. S. Government Exhibit	1,060.37	
Refund on insurance premium	5.50	

Refund over deposit to payrolls		139.57	
Labor and expense, Government exhibit 1920 Swine Show		278.27	
Refund on check returned		5.00	
Advertising 1919 catalog and premium list		645.00	
Kindling sold		47.50	
Old lumber sold		107.28	
Sims' house sold		700.00	
Sims' cottage sold		375.00	
Wilkins' house sold		200.00	
Short house sold		390.00	
Barber shop sold		165.00	
Old scales sold		15.00	
Received for broken window glass		27.47	
Miscellaneous collections by Superintendent of Grounds		25.84	
Special prize money 1919 fair		83.33	
Personal phone toll bills, refunded		2.19	
Interest on time deposit		1,600.00	
Interest on account		574.52	
Total receipts other than state fair			$176,203.16
Receipts from state fair:			
Stall rent horse department		$ 2,608.00	
Entry fees draft horse futurity		605.00	
Entry fees saddle horse stake		860.00	
Stall rent cattle department		3,014.00	
Pen rent swine department		5,101.00	
Pen rent sheep department		408.00	
Coop rent poultry department		236.50	
Space rent poultry department		345.00	
Pen rent rabbit department		54.50	
Dairy department, ice cream sales		4,178.79	
Concessions and space, Exposition Building		3,935.00	
Concessions and privileges:			
General concessions	$32,152.16		
Wortham Shows (percent)	14,838.63		
Grandstand concession (percent)	2,566.00		
Score card (percent)	1,038.96		
Giant Coaster (percent)	2,566.90		
Old Mill (percent)	1,402.52		
Delivery permits	807.00	$ 55,372.17	
Machinery Department:			
Floor space Machinery Hall	$11,264.85		
Floor space grandstand exhibit hall	906.45		
Floor space Power Hall	1,000.00		
Outside space contracts	2,156.40	$ 15,327.70	
Speed Department:			
Entry fees	$ 3,109.00		
Nomination fees Iowa State Fair Futurity No. 5	416.06		
Nomination fees Western Breeders' Futurity	1,118.61	$ 4,643.67	
Current for light and power		686.46	
Concessions and space Agricultural Building		2,800.00	
Concessions Floral Hall		35.00	
Sale of forage		21,750.03	
Association special premiums		16,172.75	
Advertising in premium list		1,151.25	
Drayage department		664.13	
Telephone collections		313.98	
Day Nursery receipts		144.05	
Vending machine receipts		10.55	
Refund on printing show tickets		177.00	
Refund on advertising		175.00	
Total receipts of fair other than ticket sales		$140,769.53	
Ticket Sales:			
Outside gates	$179,661.75		
Day grandstand	44,592.50		
Night grandstand	41,252.25		
Stock pavilion night show	4,700.75		
Total ticket sales		$270,207.25	
Total receipts of fair			$410,976.78
Grand total receipts			643,320.38

DISBURSEMENTS.

Disbursements other than fair or improvements:			
Stallion Registration Division:			
Salary, chief clerk	$ 1,851.67		
Salary, clerk and stenographer	1,065.20		
Printing and supplies	38.95		
			$ 2,955.82
Publicity Department:			
Salary, director	$ 711.03		
Salary, clerk and stenographer	350.00		
Salary, extra clerk	21.00		
Printing Greater Iowa	1,197.30		
Postage Greater Iowa	20.00		
Drayage Greater Iowa	1.50		
Cuts and engraving	25.50		
Clipping service	6.84		
			$ 2,333.17
Expense on account live stock sales			475.88
State Agricultural Convention			1,018.44
Expense of 1919 fair paid during 1920:			
Special committee work	$ 58.00		
Premiums 1919 fair	75.00		
Claims for damaged exhibits	35.70		
Stationery for 1919	69.25		
Drayage on school exhibits	6.50		
Commission on advertising in catalog	50.50		
Newspaper advertising bills	84.48		
Billboard paper	149.00		
Rental on chairs for stock pavilion	50.00		
Balance treasurer's salary	62.50		
Maintenance trucks and autos	510.02		
		$ 1,150.95	
Paving assessment		7,528.02	
Insurance premiums on buildings		3,296.04	
Expense and labor 1920 National Swine Show		727.30	
Drayage poultry coops, etc		14.66	
Dues Des Moines commercial organizations		65.00	
Check writer		40.00	
Office supplies		51.32	
Newspaper subscriptions		22.40	
Letter scales		11.29	
Premium secretary's bond		25.00	
Flowers for deceased		35.83	
Commission paid on sale of house		15.00	
City directory		8.00	
Binding 1919 award books		18.00	
Total expense other than fair			$ 19,792.12
Maintenance grounds and buildings:			
Landscape work		$ 714.02	
Grading and sodding		56.50	
Cleaning buildings		463.00	
Speed barn repairs		332.83	
Superintendent of Grounds		1,800.00	
Assistants and foremen		968.38	
Cleaning grounds		585.38	
Cattle barns, frame repairs		998.04	
Miscellaneous maintenance		718.15	
Mule team, feed, etc		187.38	
Wrecking cattle barn No. 2		1,327.40	
Water system, repairs		685.62	
Hauling manure		376.14	
Lumber sheds, moving and repairs		473.44	
Poultry building, repairs		13.00	
Streets, oiling and dragging		854.59	
Tools and implements, repairs		142.86	
Drayage, miscellaneous		773.78	
Race track fence, repairs		81.88	
Plants and flower beds		135.78	
Race track, resurfacing and working		1,742.37	
Farm house repairs		26.28	
Drainage system, repairs		67.15	
Old ice house, repairs		7.00	
Moving filling station		18.00	
Truck and auto, repairs		834.86	
Frame horse barn, repairs		387.50	
Cleaning sand pit		39.60	
Machinery Hall, repairs		169.74	

Mowing grass and weeds		736.90	
Fire station, moving		113.44	
Old Mill site, grading		109.45	
Cattle barn, repairs		10.00	
Sims' cottage, moving and repairs		123.52	
Agricultural Building, repairs		826.64	
P. O. Building, moving and repairs		285.94	
Boys and Girls' Club Building, repairs		32.00	
Horse barn, brick, repairs		146.69	
Valley Junction dining hall, repairs		8.22	
Vaudeville stages, repairs		22.72	
Gasoline and oil for trucks and autos		1,198.52	
Night watchman		1,460.00	
Trimming trees		231.84	
Bleacher repairs		75.50	
Police headquarters, repairs		5.00	
Meat market, repairs		4.00	
Horse barn No. 6, repairs		85.22	
Exposition Building, repairs		83.77	
Fish pond fence		6.22	
Grand Avenue entrance, painting		11.56	
Walnut Street entrance, painting		4.44	
Administration building, painting roof		146.27	
Swine barn, repairs		78.85	
Brick dining halls, repairs		96.77	
Toilets, camping grounds, repairs		128.09	
Women and Children's Building, repairs		168.23	
Grandstand, repairs		81.15	
Floral Hall, repairs		31.50	
Sheep barn, repairs		32.00	
Light system, repairs		145.28	
Total maintenance grounds and buildings			$ 21,470.40
Additions and permanent improvements:			
Light system		3,061.52	
Streets, grading and gravel		4,574.17	
Walks and curbing		3,423.52	
Tools and implements		294.14	
Fair Ground equipment:			
Camp chairs	$ 327.75		
Brick dining hall equipment	87.90		
800 cots and mattresses	4,830.40		
Hose	88.69		
Stove for Boys' Club Building	31.50		
Jars for Floricultural Department	18.00		
Hand bags, Treasurer's Department	33.90		
Electric fans	54.00		
Water coolers	148.70		
Metal signs for stiles	98.25		
Ticket boxes	56.50		
Mirrors	21.00		
		$ 5,796.59	
New Cattle Barn:			
Paid on general contract	$159,233.00		
Paid on plumbing contract	2,015.27		
Paid on architect fees	5,000.00		
Electric wiring	1,828.04		
Sewer pipe for drains	1,259.77		
Labor on drain, water, etc.	1,160.00		
Grading and fill	4,800.74		
Cement floors in toilet	177.37		
Lumber in toilet partitions	80.78		
Painting metal roof	282.68		
Gold letters for front	84.00		
Hardware for doors	72.10		
		$175,993.75	
Residence, garage and cistern		14,717.09	
Water system, extensions		695.95	
Grand Avenue entrance, balance on contract		529.55	
Walnut Street entrance, balance on contract		321.49	
University Avenue entrance, balance on contract		652.50	
Real estate, balance on Lot 4		1,873.33	
Speed barn No. 1		686.17	
Lumber sheds, additions		61.20	
Boys' dormitory		1,591.85	
Dodd & Struthers' building, purchase price and additions		2,361.99	
Grading new ground		3,348.27	
Auto park, grading		167.91	

Nurse cow barn	453.89	
Trees and shrubs	1,011.15	
Filling station	13.50	
Exposition Building	685.69	
Retaining wall	741.26	
Toilets, new camp grounds	199.29	
Suffrage Cottage, purchase price and additions	250.50	
Landscape work	24.76	
Old P. O. dining hall, additions	128.72	
College building, booths	107.73	
Grandstand, painting chairs	194.09	
Sewer system, extensions	600.82	
Auto guard fence	54.11	
Agricultural Building, booths	270.53	
Ticket booth, new	201.24	
W. C. T. U. Building, purchase price	75.00	
Women and Children's Building	285.53	
Administration Building	198.10	
Race track fence	263.77	
Wash racks, Cattle Department	342.25	
Lumber from temporary pens	832.00	
Signs, for ticket booths	45.00	
Poultry cooping	736.51	
Brick dining hall	51.90	
Mule barn	122.88	
Stock pavilion, north box	70.96	
Telephone system, extensions	405.72	
Sims' cottage	13.38	
Swine pavilion	48.96	
Speed barn No. 12	2.50	
Speed born No. 13	2.50	
Miscellaneous improvements	196.67	
Administration Department cottage	21.00	
Electric light globes	613.03	
Total additions and improvements		$229,415.93

EXPENSE OF FAIR.

Expense of fair other than premiums:		
Executive committee meetings		$ 1,248.44
Special committee meetings		1,885.12
Express, telegraph and telephone		522.74
Postage		1,438.48
Printing:		
Envelopes and stationery	$ 335.70	
Plats of fair ground	11.75	
Entry cards and tags	86.56	
Placards	100.25	
Premium tags	146.50	
Miscellaneous cards	91.50	
Ring cards	421.75	
Tickets	1,688.12	
Cuts and compositions	230.46	
Christmas cards	31.50	
Premium lists	2,236.00	
Live stock catalogs	736.20	
Boys and Girls' premium lists	168.00	
Educational premium lists	77.75	
Speed program	327.76	
Sunday School program	41.00	
Miscellaneous	292.24	
Contracts and application blanks	38.00	
Report blanks	149.83	
Judges' sheets	83.82	
Record and receipt books	184.80	
Baby Health catalog	190.00	
Horseshoe pitching contest	10.50	
Billheads	38.65	
Entry blanks	175.50	
Catalog cards	25.75	
Pamphlets spelling contest	96.50	
Art catalogs	47.10	
Railroad posters	36.50	
Multigraph letters	27.75	
Shipping tags	18.00	
Expense warrants	59.22	
Creamery diplomas	22.50	
Score cards	38.88	
Baby Health classification	55.50	
Signs, official car	4.00	
Program Sunday concerts	67.00	

Horse judging programs	28.00	
Night horse show programs	110.00	
		$ 8,530.84
Advertising:		
Country newspapers	$ 5,614.19	
Plate for country newspapers	1,784.67	
Des Moines daily papers	5,405.72	
Daily papers outside Des Moines	904.95	
Agriculture and live stock papers	1,736.07	
Horse papers advertising speed program	501.09	
Miscellaneous papers	172.50	
Director of Advertising, salary 5 mos.	833.34	
Assistant during fair	100.00	
Clerk and stenographer, five months	625.00	
Printing Greater Iowa	688.65	
Hangers and window cards	767.57	
Billboard paper	154.30	
Billboard service	1,168.80	
Distributing advertising matter	166.50	
Auto road map advertising	150.00	
50,000 advertising heralds	613.50	
Daily programs	90.65	
Photographs	261.75	
Co-operative Publicity News Service	25.00	
Cuts, electros	196.34	
Drawings and designs	132.00	
		$22,092.59
Music and Attractions:		
Night Show, "Siege of Dardanelles"	$ 9,613.81	
Thaviu's band and ballet	4,700.00	
Henry's band and soloists	2,089.00	
Fischer's Burlington band	1,781.50	
Argonne Post band	271.00	
National Drum Corps	425.00	
Mahaffey orchestra	275.00	
Des Moines Ladies' orchestra	500.00	
Iowa State Fair orchestra	452.00	
Eleven hippodrome acts	8,092.80	
Ruth Law's Flying Circus	9,000.00	
Raub balloon ascensions	306.00	
		$ 37,506.11
Supplies and stationery		$ 1,285.27
Light and power current		1,374.32
Light and power, labor		244.00
Water, August and September		750.60
Refund stall rent, tickets, etc.		364.50
Forage, sold		20,852.75
Salary, secretary and assistants		10,576.85
Board meetings		373.91
Assistants and foremen		321.00
Scavenger work, Sanitary Department		285.00
Race track		54.45
Cleaning grounds		1,410.05
Cleaning buildings		2,819.80
Decorating buildings		2,179.00
Plants and flowers		1,735.35
Ground Supplies:		
Brooms	$ 97.50	
Paper towels and toilet paper	427.00	
Cheese cloth	46.52	
Paper for tables	60.00	
Soap	19.25	
Maps	19.25	
Pails and wash basins	20.50	
Wrapping twine	10.58	
Lime for toilets	8.10	
Office supplies	48.33	
Miscellaneous supplies	3.78	
		$ 760.81
Cups, medals, engraving, etc.		1,078.83
Premium ribbons and badges		2,825.06
Signs for exhibits and buildings		825.15
Payroll Horseshoe pitching contest		45.00
Payroll Rabbit Department		155.00
Payroll Boys and Girls' Club		1,066.68
Payroll Cattle Department		1,958.70
Payroll Admissions Department, including gate police		7,298.20

Payroll Swine Department		1,260.40
Payroll Sheep Department		697.98
Payroll Speed Department		1,219.00
Payroll Machinery Department		1,660.57
Payroll Horticultural Department		528.04
Payroll Textile and China Department		752.11
Payroll Public Safety		5,183.75
Payroll Concessions		3,752.00
Payroll Horse Department		1,943.00
Payroll Treasury Department		3,064.28
Payroll Awards Department		136.00
Payroll Auto Parking, police		400.00
Payroll Property Men		338.00
Payroll Baby Health Department		1,103.58
Payroll Matron Women and Children's Building		66.00
Payroll Program Committee, Women and Children's Building		830.04
Payroll Ticket Auditing		439.00
Payroll Art Department		309.95
Payroll Poultry Department		438.00
Payroll Agricultural Department		976.10
Payroll Sanitary Department		313.87
Payroll Day Nursery		190.50
Payroll Dairy Department		280.31
Expense butter exhibit in refrigerator		250.00
Dairy and Ice Cream Department:		
Ice Cream	$ 1,939.90	
Payroll ice cream stand	282.77	
Sanitary dishes and supplies	134.85	
		$ 2,357.52
Payroll Campers' Headquarters		359.00
Payroll Educational Department		174.70
Payroll and expense Cow Testing Association		207.04
Payroll Floricultural Department		213.70
Cuts for plats of buildings and grounds		36.22
College exhibit garden		106.52
Refund account		503.80
Dues Advertising Club		10.00
Dues International Association of Fairs		100.00
Dues American Trotting Association		105.00
Sawdust for judging ring		150.00
Temporary water mains and attendants		464.78
Rent on pianos		35.00
Rental moving picture machine		37.00
Premium, ticket sellers' bond		69.00
Rent on chairs, Stock Pavilion		50.00
Expense Sunday School		82.27
Press clippings		67.74
Putting up awnings		22.50
Directory of horsemen		5.00
Drayage on furniture		16.50
Subscription to horse papers		9.00
Miscellaneous labor during fair		1,733.19
Canes for police department		48.00
Expense on loan art exhibit		75.00
Rental typewriters		19.50
Laundry Day Nursery		14.68
Plats of ground, Machinery Department		24.86
Miscellaneous supplies		11.44
Administration Building janitor		474.80
Temporary hog pens		1,973.40
Catalogs, live stock entries		20.00
Auto races, prizes and bonuses		5,926.25
Boy Scouts' camp		400.00
Payroll Drayage Department		931.92
Placing and removing chairs in grandstand		93.05
Cleaning barns and pens		2,060.21
Janitor Women and Children's Building		420.10
Toilet attendants		957.30
Sidewalk sweepers		505.20
Turnstile mechanics		307.50
Fireman and coal, dining halls		375.36
Spraying miscellaneous buildings		124.78
State Day banquet, and meals for guests		783.75
State college exhibit		170.38
Taxicab service for judges		104.75
Gasoline for trucks and autos		509.46
Plumbers in charge of toilets		326.75
Sheep shearing contest		49.10
Rent of tents and cots		1,986.75

Feed for police horses, poultry, etc.	329.45	
Telephones, installation and removing	732.84	
Expense of fair other than premiums		$186,667.14
Cash Premiums Paid:		
Horses	$ 24,653.00	
Cattle	29,891.50	
Swine	8,697.00	
Sheep	4,084.00	
Goats	96.00	
Poultry	770.00	
Rabbits	153.75	
Agricultural	9,881.00	
Culinary	795.50	
Honey and Bees	436.00	
Dairy	722.00	
Horticultural	2,768.75	
Floricultural	1,905.80	
Textile, China, etc.	1,296.50	
Graphic and Plastic Arts	538.00	
Educational	551.00	
Junior Department	4,507.67	
Boys and Girls' Judging Contest	375.00	
Boys' Team Judging Contest	350.00	
State Spelling Contest	100.00	
Horseshoe Pitching Contest	300.00	
Speed	19,747.68	
Total premiums paid		$112,620.15
Total expense of fair		299,287.29
Grand total disbursements		$569,965.74

SUMMARY OF RECEIPTS AND DISBURSEMENTS AND RECONCILIATION OF ACCOUNT WITH THE TREASURER.

RECEIPTS.

Cash balance December 1, 1919		$ 56,140.44
Receipts from sources other than fair		176,203.16
Receipts of fair other than ticket sales	$140,769.53	
Receipts from ticket sales	270,207.25	
Total receipts of fair		410,976.78
Grand total receipts		$643,320.38

DISBURSEMENTS.

Disbursements other than fair		$ 19,792.12	
Maintenance grounds and buildings		21,470.40	
Additions and permanent improvements		229,415.93	
Expense of fair other than premiums	$186,667.14		
Cash premiums paid	112,620.15		
Total cost of fair		299,287.29	
Grand total disbursements			$569,965.74
Balance on hand November 30, 1920			73,354.64
Warrants outstanding			1,608.59
Cash balance in treasury, November 30, 1920			$ 74,963.23

COMPARATIVE STATEMENT OF TICKET SALES AT OUTSIDE GATES, DAY AND NIGHT GRANDSTAND AND STOCK PAVILION NIGHT SHOWS FOR THE 1920 AND 1919 IOWA STATE FAIRS.

General Admissions	1920 Fair			1919 Fair		
	Price	No. Sold	Total Value	Price	No. Sold	Total Value
Outside Gates:						
General Admission	$ .75	170,247	$ 127,685.25	$ .50	206,297	$ 103,148.50
Round-Up	.75	8,997	6,747.75	.50	10,570	5,285.00
After 6 P. M.	.25	20,762	5,190.00	.25	35,375	8,843.75
Sunday, August 29th	.50	14,926	7,463.00			
Half Fare	.25	28,967	7,241.75	.25	44,931	11,232.75
Campers	3.00	2,877	8,631.00	2.00	2,593	5,186.00
Automobile	.50	18,561	9,280.50			
Taxi Cab	5.00	168	840.00	5.00	80	400.00
Exhibitors	3.00	2,148	6,444.00	2.00	1,808	3,616.00
Solicitors	4.00	34	136.00	2.50	45	112.50
Over Cash Turnstiles						14.25
			$ 179,661.75			$ 137,838.75
Day Grandstand:						
Box Seats	$1.00	3,018	$ 3,018.00	$ .75	2,888	$ 2,166.00
Reserved Lower Half	.75	16,367	12,275.25)			
Reserved Upper Half	.50	22,462	11,231.00)	.50	40,159	20,079.50
Children-Paddock	.25	835	208.75			
Cash Turnstile-Paddock	.50	35,719	17,859.50	.25	38,855	9,713.75
Quarter Stretch				.25	3,672	918.00
Total Day Grandstand		78,401	$ 44,592.50		85,574	$ 32,877.25
Night Grandstand:						
Box Seats	$1.00	2,598	$ 2,598.00	$ .75	2,603	$ 1,952.25
Reserved Lower Half	.75	14,134	10,600.50)			
Reserved Upper Half	.50	19,218	9,609.00)	.50	36,033	18,016.50
Children-Paddock	.25	1,097	274.25			
Cash Turnstile-Paddock	.50	36,309	18,154.50	.25	65,558	16,389.50
Over on Cash Turnstiles			16.00			
Total Night Grandstand		73,356	$ 41,252.25		104,194	$ 36,358.25
Night Stock Pavilion:						
Reserved Seats	$ .50	8,448	$ 4,224.00	$ .50	8,084	$ 4,042.00
Standing Room	.25	1,907	476.75	.25	2,069	517.25
Total Stock Pavilion		10,355	$ 4,700.75		10,153	$ 4,559.25
Total Ticket Sales			$ 270,207.25			$ 211,633.50

SUMMARY.

	1920	1919	Increase	Decrease
Outside Gates	$ 179,661.75	$ 137,838.75	$ 41,823.00	
Day Grandstand	44,592.50	32,877.25	11,715.25	
Night Grandstand	41,252.25	36,358.25	4,894.00	
Stock Pavilion Night Show	4,700.75	4,559.25	141.50	
Totals	$ 270,207.25	$ 211,633.50	$ 58,573.75	

COMPARATIVE STATEMENT OF RECEIPTS 1920 AND 1919 FAIRS.

	1920	1919	Increase	Decrease
Stall rent horse department	$ 2,608.00	$ 1,241.00	$ 1,367.00	
Draft horse futurity entry fees	605.00	495.00	110.00	
Entry fees saddle horse stakes	860.00	320.00	540.00	
Stall rent cattle department	3,014.00	1,453.50	1,560.50	
Pen rent swine department	5,101.00	1,273.00	3,828.00	
Pen rent sheep department	408.00	248.50	159.50	
Coop rent poultry department	236.50	479.25		$ 242.75
Concessions, poultry department	345.00	240.00	105.00	
Pen rent rabbit department	54.50	95.00		40.50
Dairy department, ice cream sales	4,178.79	3,316.45	862.34	
Exposition building, space	3,935.00	3,085.00	850.00	
Concessions and privileges	55,372.17	47,795.15	7,577.02	
Machinery department	15,327.70	9,357.30	5,970.40	
Agricultural building, space	2,835.00	2,347.50	487.50	
Speed department	4,643.67	5,654.81		1,011.14
Light and power sold	686.46	648.58	37.88	
Forage department	21,750.03	16,995.70	4,754.33	
Association special premiums	16,172.75	10,009.30	6,163.45	
Advertising in premium list	1,151.25	1,347.50		196.25
Advertising in catalog		1,860.00		1,860.00
Drayage department	664.13	1,076.50		412.37
Telephone collections	313.98	405.87		91.89
Day nursery receipts	144.05	106.98	37.07	
Miscellaneous receipts	362.55	89.16	273.39	
Ticket sales:				
Outside gates	179,661.75	137,838.75	41,823.00	
Day grandstand	44,592.50	32,877.25	11,715.25	
Night grandstand	41,252.25	36,358.25	4,894.00	
Stock pavilion night show	4,700.75	4,559.25	141.50	
Totals	$ 410,976.78	$ 321,574.55	$ 93,257.13	$ 3,854.90
Net increase		89,402.23		89,402.23
	$ 410,976.78	$ 410,976.78	$ 93,257.13	$ 93,257.13

COMPARATIVE STATEMENT OF PREMIUMS PAID 1920 AND 1919 FAIRS.

	1920	1919	Increase	Decrease
Horse	$ 24,653.00	$ 15,635.00	$ 9,018.00	
Cattle	29,891.50	21,399.20	8,492.30	
Swine	8,697.00	8,316.00	381.00	
Sheep	4,084.00	4,121.00		$ 37.00
Goats	96.00	219.00		123.00
Poultry	770.00	1,260.00		490.00
Rabbits	153.75	86.00	67.75	
Agricultural	9,881.00	6,076.00	3,805.00	
Culinary	795.50	803.00		7.50
Honey and bees	436.00	477.00		41.00
Dairy	722.00	657.00	65.00	
Horticultural	2,768.75	2,373.50	395.25	
Floricultural	1,905.80	1,733.90	171.90	
Textile, china, etc.	1,296.50	1,060.00	236.50	
Graphic and plastic arts	538.00	626.00		88.00
Educational	551.00	587.00		36.00
Junior department	4,507.67	814.00	3,693.67	
Boys' and girls' judging contest	375.00	650.00		275.00
Boys' team judging contest	350.00	400.00		50.00
State spelling contest	100.00	100.00		
Horseshoe pitching contest	300.00		300.00	
Speed	19,747.68	18,144.71	1,602.97	
Total	$ 112,620.15	$ 85,538.31	$ 28,229.34	$ 1,147.50
Total increase		27,081.84		27,081.84
	$ 112,620.15	$ 112,620.15	$ 28,229.34	$ 28,229.34

COMPARATIVE STATEMENT OF EXPENSE OTHER THAN PREMIUMS FOR THE 1920 AND 1919 FAIRS.

	1920	1919	Increase	Decrease
Executive committee meetings	$ 1,248.44	$ 1,449.95		$ 201.51
Special committee meetings	1,885.12	1,637.70	$ 247.42	
Express, telegraph and telephone	522.74	663.49		140.75
Postage	1,438.48	1,616.40		177.92
Printing	8,530.84	7,411.64	1,119.20	
Advertising	22,092.59	17,536.40	4,556.19	
Music and attractions	37,506.11	30,267.00	7,239.11	
Supplies, stationery, etc.	1,285.27	590.59	694.68	
Auto races, prizes and bonuses	5,926.25	4,800.00	1,126.25	
Light and power (current)	1,374.32	827.64	546.68	
Light and power (labor)	244.00	523.06		279.06
Water August and September	750.60	645.75	104.85	
Refund stall rent, etc.	364.50	211.00	153.50	
Forage purchased for feed barn	20,852.75	15,689.08	5,163.67	
Salary secretary and assistants	10,576.85	8,568.75	2,008.10	
February board meeting	373.91	378.00		4.09
Sanitary department	1,569.05	1,425.38	143.67	
Cleaning grounds and buildings	4,735.05	3,213.16	1,521.89	
Decorating all buildings	2,179.00	1,322.68	856.32	
Payroll admissions department	7,298.20	5,409.00	1,889.2	
Payroll concessions department	3,752.00	2,762.00	990.00	
Payroll public safety department	5,942.75	8,726.01		2,783.26
Payroll treasurer's department	3,064.28	2,481.82	582.46	
Payroll ticket auditing department	439.00	395.00	44.00	
Payroll speed department	1,219.00	1,084.00	135.00	
Payroll horse department	1,943.00	1,896.71	46.29	
Payroll cattle department	1,958.70	1,651.21	307.49	
Payroll swine department	1,260.40	1,046.10	214.30	
Payroll sheep department	697.98	501.00	196.98	
Payroll poultry department	438.00	699.85		261.85
Payroll machinery department	1,660.57	1,384.16	276.41	
Payroll and expense dairy departm't	2,887.83	2,382.19	505.64	
Payroll agricultural department	976.10	823.00	153.10	
Payroll horticultural department	528.04	354.55	173.49	
Payroll floricultural department	213.70	153.75	59.95	
Payroll textile and china department	752.11	793.36		41.25
Payroll art department	384.95	419.00		34.05
Payroll junior department	966.68	781.86	184.82	
Payroll baby health department	1,103.58	911.88	191.70	
Program committee W. & C. Bldg.	896.04	505.06	390.98	
Poyroll day nursery	190.50	175.00	15.50	
Payroll live stock sanitary departm't	313.87	261.00	52.87	
Expenses boys' camp, 1919, Boy Scouts, 1920	400.00	1,938.46		1,538.46
Payroll property men	338.00	309.85	28.15	
Payroll awards department	136.00	211.25		75.25
Payroll educational department	174.70		174.70	
Payroll janitors administration building	474.80	571.00		96.20
Payroll janitors W. & C. building	420.10	560.70		140.60
Payroll rabbit department	155.00		155.00	
Plants and flowers	1,735.35	1,505.74	229.61	
Expense boys' judging contest	100.00	83.50	16.50	
Expense U. S. government exhibit		3,000.00		3,000.00
Cups, medals and engraving	1,078.83	728.23	350.60	
Signs for night show, buildings, etc.	825.15	689.83	135.32	
Water system, temporary extension	464.78	242.83	221.95	
Premium ribbons and badges	2,825.06	1,988.99	836.07	
Tents, cots, bedding, etc.	1,986.75	2,391.07		404.32
Payroll drayage department	1,441.38	4,278.65		2,837.27
Fireman and coal, for dining halls	375.36	390.58		15.22
Miscellaneous labor during fair	3,793.40	3,196.85	596.55	
All other items of expense	7,599.33	7,079.48	519.85	
Total expense other than premiums	$ 186,667.14	$ 163,542.19	$ 35,156.01	$ 12,031.06
Total increase		23,124.95		23,124.95
	$ 186,667.14	$ 186,667.14	$ 35,156.01	$ 35,156.01

SPEED DEPARTMENT, IOWA STATE FAIR AND EXPOSITION 1920.

In accordance with the rules and advertised conditions under which the races were conducted all entrance fees were added to the purse.

HARNESS RACES.

Class	Amount Offered	Entry Fees Received	Amount Paid Out	Net Cost	Number Starters
*Two-year-old trot	$ 400.00	$ 64.00	$ 464.00	$ 400.00	2
*Two-year-old pace	300.00	45.00	345.00	300.00	2
*2:13 pace, "The Hawkeye"	1,500.00	840.00	2,340.00	1,500.00	10
2:13 trot	1,000.00	115.00	1,115.00	1,000.00	5
2:11 pace	1,000.00	90.00	1,090.00	1,000.00	6
*2:14 trot, "The Great Western"	1,500.00	675.00	2,175.00	1,500.00	8
2:25 trot	1,000.00	165.00	1,165.00	1,000.00	5
2:16 pace	1,000.00	185.00	1,185.00	1,000.00	7
††Free-For-All pace	1,000.00				
2:16 trot	1,000.00	150.00	1,150.00	1,000.00	8
2:10 trot	1,000.00	55.00	949.50	1,000.00	3
2:20 pace	1,000.00	240.00	1,240.00	1,000.00	10
2:20 trot	1,000.00	250.00	1,250.00	1,000.00	11
2:09 pace	1,000.00	55.00	949.50	1,000.00	3
Total	$ 13,700.00	$ 2,929.00	$ 15,418.00	$ 12,700.00	80

*Early closing events.

††Declared off on account of insufficient number of entries.

FUTURITIES.

Iowa State Fair Futurity No. 5—(Trotting division)	$ 700.00	$ 291.25	$ 991.25	$ 700.00	4
Iowa State Fair Futurity No. 5—(Pacing division)	300.00	124.82	424.82	300.00	2
W. B. Futurity No. 7—(Trotting division)		930.52	930.52	†200.00	4
W. B. Futurity No. 7—(Pacing division)		188.09	166.88	†100.00	2
W. B. Futurity bonus			300.00		
Total	$ 1,000.00	$ 1,534.68	$ 2,834.68	$ 1,300.00	12

†Bonus paid Western Breeders Futurity.

RUNNING RACES.

State Fair Derby	$ 400.00	$ 50.00	$ 450.00	$ 400.00	3
⅝-mile dash	150.00	15.00	165.00	150.00	3
4½-furlong dash	125.00	15.00	140.00	125.00	3
⅝-mile dash	125.00	20.00	145.00	125.00	4
6-furlong dash	150.00	15.00	165.00	150.00	3
4½-furlong dash	125.00	15.00	140.00	125.00	3
⅝-mile dash	125.00	20.00	145.00	125.00	4
4½-furlong dash	125.00	20.00	145.00	125.00	3
Total	$ 1,325.00	$ 170.00	$ 1,495.00	$ 1,325.00	26
Total harness races	$ 14,700.00	$ 4,463.68	$ 18,252.68	$ 14,000.00	92
Grand total all races	$ 16,025.00	$ 4,633.68	$ 19,747.68	$ 15,325.00	118

The following is the attendance of the 1920 fair, by days, compared with 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918 and 1919 fairs:

	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910
Wednesday	7,919	5,567	5,214	6,098	4,871	3,112	4,537	3,849	-------	-------	-------
Thursday	13,609	10,428	8,346	10,435	9,004	7,610	9,886	8,608	3,090	4,074	-------
*Friday	50,249	40,004	29,713	38,079	30,671	27,722	27,613	33,020	7,503	6,063	4,956
†Saturday	38,233	37,507	24,573	29,771	29,853	17,158	27,999	26,861	27,957	27,957	30,512
Sunday	27,622	28,497	20,938	28,719	24,236	14,190	22,200	25,211	18,902	17,612	16,062
Monday	61,927	61,431	39,089	43,649	46,983	35,085	41,229	58,045	40,602	37,309	25,355
Tuesday	67,170	78,612	54,434	65,292	59,930	47,501	39,612	66,465	60,379	64,699	52,208
Wednesday	56,928	71,653	50,876	66,735	49,033	44,103	46,496	40,972	58,643	60,58	57,918
Thursday	33,521	46,613	67,072	38,351	24,270	31,955	31,523	17,431	38,831	34,117	31,854
Friday	26,658	27,835	24,122	22,169	13,115	16,630	21,978	-------	16,116	18,173	12,368
Totals	383,836	408,147	324,377	349,298	291,972	245,066	273,073	280,462	272,023	270,082	231,233

*Children's day, 1913-1914-1915-1916-1917-1918-1919.
†Children's day, 1910-1911-1912.

ADMISSIONS TO GRAND STAND, AFTERNOON AND EVENING, 1920, COMPARED WITH 1916, 1917, 1918 and 1919.

	1920 Fair		1919 Fair		1918 Fair		1917 Fair		1916 Fair	
	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions
Friday	15,659	12,777	12,531	12,436	8,090	6,664	9,644	8,509	3,824	6,005
Saturday	7,361	8,575	6,773	12,431	7,265	7,065	5,907	7,279	8,084	6,660
Monday	14,333	19,119	15,398	24,719	11,107	15,101	9,721	15,038	11,432	16,574
Tuesday	14,191	17,110	15,871	24,395	12,938	17,897	13,528	20,182	13,161	16,844
Wednesday	11,856	13,050	14,797	21,037	12,442	16,173	20,502	18,659	10,596	12,533
Thursday	6,994	6,911	10,523	13,616	23,810	17,212	8,713	9,779	3,055	*
Friday	13,696	*	15,024	-------	12,103	-------	12,304	------	5,506	-------
Totals	84,090	77,542	91,017	108,634	87,775	80,089	80,319	79,446	55,658	58,616

*Show called off on account of rain.

ADMISSIONS TO LIVE STOCK AND HORSE SHOW, IN STOCK PAVILION, 1920, COMPARED WITH 1912, 1913, 1914, 1915, 1916, 1917, 1918 and 1919.

	1920	1919	1918	1917	1916	1915	1914	1913	1912
Saturday	1,765	1,543	899	758	942	484	806	1,042	-------
Monday	2,417	2,357	1,225	2,105	1,581	1,029	957	1,826	1,233
Tuesday	2,755	3,016	2,035	2,183	2,107	1,580	2,113	2,472	2,265
Wednesday	2,646	2,663	2,003	2,133	1,501	1,242	1,264	1,566	2,070
Thursday	1,552	1,662	-------	1,091	667	493	605	438	1,262
Totals	11,135	11,241	6,162	8,270	6,798	4,228	5,745	7,344	6,830

The following table gives the number of exhibitors and the number of entries made in each department of the 1919 and 1920 fairs:

Department	1920 Fair		1919 Fair	
	No. Exhibitors	No. Entries	No. Exhibitors	No. Entries
Horses	119	1,728	94	1,115
Cattle	278	2,067	236	1,998
Swine	527	4,425	314	3,197
Sheep	33	839	28	784
Goats	2	35	4	71
Poultry	101	1,025	132	2,100
Rabbits	31	245	33	190
Agriculture	338	2,100	217	1,869
Pantry	356	2,353	274	2,115
Dairy	70	81	48	49
Horticulture	90	1,747	53	909
Floriculture	22	591	17	443
Textile, china, etc.	230	1,860	230	1,748
Graphic and plastic arts	23	84	30	131
Boys' and girls' club	726	*2,111	------	------
Educational	25	355	326	1,082
Implements and machinery	360	------	338	------
Totals	3,331	21,641	2,399	17,801

*Calves, swine and sheep counted in open classes above.

The following tabulation gives the number of exhibitors and the number of horses, ponies and mules entered and the actual number shown at the 1919 and 1920 fairs:

Breed	1920 Fair			1919 Fair		
	No. Exhibitors	No. Horses Entered	No. Horses Shown	No. Exhibitors	No. Horses Entered	No. Horses Shown
Percheron	29	161	144	25	114	73
Clydesdale	19	97	92	11	53	83
Shire	13	113	95	12	64	64
Belgian	14	116	94	15	107	74
Draft	24	30	28	12	36	*
Saddle and show horses	28	130	124	27	99	60
Morgan	----	----	----	3	11	11
Ponies	10	116	105	16	125	95
Mules and jacks	9	70	69	7	66	42
Totals	†119	833	751	†97	593	472

*Counted with draft horses.
†Number individual exhibitors.

The following tabulation gives the number of cattle exhibitors and the number of cattle entered by breeds and the actual number of cattle shown at the 1919 and 1920 fairs:

Breed	1920 Fair			1919 Fair		
	No. Exhibitors	No. Cattle Entered	No. Cattle Shown	No. Exhibitors	No. Cattle Entered	No. Cattle Shown
Shorthorns	40	284	219	45	264	217
Herefords	23	237	209	17	207	153
Aberdeen Angus	16	119	110	16	123	92
Polled Shorthorns	9	68	56	2	11	11
Red Polled	3	48	43	6	99	66
Galloway	2	29	27	----	----	----
Holstein	44	182	162	13	199	169
Jersey	7	49	40	6	73	53
Guernsey	7	88	82	6	56	51
Ayrshires	3	38	37	4	52	31
Brown Swiss	2	44	44	3	53	49
Baby beeves	122	171	140	118	161	156
Totals	278	1,357	1,169	236	1,298	1,013

The following tabulation gives the number of swine exhibitors and the number of swine entered by breeds and the actual number of swine shown at the 1919 and 1920 fairs:

Breed	1920 Fair			1919 Fair		
	No. Exhibitors	No. Swine Entered	No. Swine Shown	No. Exhibitors	No. Swine Entered	No. Swine Shown
Poland China	99	844	768	76	913	863
Spotted Poland China	16	185	172	10	220	148
Duroc Jersey	121	1,206	1,150	79	985	900
Chester White	66	1,030	787	44	686	633
Berkshire	4	132	90	5	154	76
Hampshire	45	659	642	21	500	390
Mule Foot	----	----	----	1	21	21
Yorkshire	3	47	47	4	67	41
Tamworth	6	75	70	4	74	47
Pig Club	167	310	310	70	154	78
Totals	527	4,488	4,036	214	3,774	3,197

The following table sets forth the amount of cash premiums paid

	1920	1919	1918	1917	1916	1915
Horses	$ 24,653.00	$15,635.00	$13,555.00	$13,385.00	$14,412.00	$17,364.00
Cattle	29,891.50	21,399.20	16,172.55	15,618.25	15,176.00	14,120.00
Swine	8,697.00	8,316.00	6,881.50	6,433.00	4,570.00	4,188.00
Sheep	4,084.00	4,121.00	3,402.00	4,039.00	3,757.00	3,375.00
Goats	96.00	219.00	77.00	----------	----------	----------
Poultry	770.00	1,260.00	856.50	1,200.00	1,408.00	1,047.00
Pet stock	153.75	86.00	41.50	----------	----------	----------
Agriculture	9,881.00	6,076.00	5,102.50	6,360.50	6,803.00	6,672.00
Culinary	1,231.50	1,280.00	1,190.50	1,149.50	1,198.50	1,214.50
Dairy	722.00	657.00	642.00	657.00	652.00	652.00
Horticulture	2,768.75	2,373.50	1,993.50	2,086.25	1,905.00	1,759.75
Floriculture	1,905.80	1,733.90	1,533.70	1,553.80	1,447.40	1,575.00
Textile, etc.	1,296.50	1,060.00	1,035.00	1,225.00	1,114.50	1,150.00
Art	538.00	626.00	648.00	648.00	662.00	554.00
Educational	551.00	1,401.00	1,563.00	1,442.00	1,288.00	1,133.00
Scholarships	375.00	650.00	----------	----------	421.84	475.00
Speed premiums	19,747.67	18,144.71	17,555.88	16,544.77	12,145.17	14,319.50
Dog show	----------	----------	----------	----------	----------	----------
*Baby health	----------	----------	----------	----------	----------	----------
Spelling contest	100.00	100.00	100.00	100.00	100.00	----------
Team judging	350.00	400.00	----------	----------	----------	----------
Junior department	4,507.68	----------	----------	----------	----------	----------
Horseshoe contest	300.00	----------	----------	----------	----------	----------
Total premiums	$ 112,620.15	$85,538.31	$72,350.13	$72,442.07	$67,060.41	$69,598.75

*Cups and medals given in place of cash prizes since 1912.

STATISTICAL STATEMENT OF DEPARTMENT
1901 to 1920,

Showing Receipts and Disbursements of Iowa State Fair and Other Improvements, Maintenance Grounds and Buildings, Etc.,

	Receipts						Disbursements	
	Cash Balance Beginning of Year	From State Fair	From State Appropriation	From Other Sources	Total Receipts For Year	Grand Total	Premiums Paid	Other Fair Expenses
1896	$ 116.79	$ 36,622.10	$ 7,000.00	$ 6,710.22	$ 50,332.32	$ 50,449.11	$ 16,404.29	$ 15,351.06
1901	28,616.55	50,712.91	1,000.00	2,753.82	54,466.73	83,083.28	19,203.83	13,925.87
1902	34,244.93	63,084.71	38,000.00	3,037.06	104,121.77	138,366.70	21,736.31	20,073.34
1903	30,372.25	59,838.56	1,000.00	3,140.79	63,979.35	94,351.60	23,813.13	21,989.56
1904	28,963.11	66,100.36	48,000.00	2,622.03	116,722.39	145,685.50	24,691.68	28,485.42
1905	29,657.23	84,786.25	1,000.00	2,840.92	88,627.17	118,284.49	28,730.89	34,408.62
1906	39,976.34	110,929.85	1,000.00	3,717.16	115,647.01	155,623.35	31,703.94	40,315.60
1907	50,294.87	104,356.75	76,000.00	5,452.34	185,908.09	236,103.96	35,504.79	43,647.20
1908	35,227.90	138,764.66	1,000.00	3,262.95	143,027.61	178,355.51	38,744.56	55,848.65
1909	25,328.73	137,307.40	101,000.00	5,257.42	243,564.82	268,893.55	42,262.76	66,963.12
1910	4,985.25	157,250.77	1,000.00	14,658.30	171,918.07	176,903.32	49,717.50	80,513.68
1911	7,283.44	179,549.67	78,000.00	5,275.72	262,825.39	270,108.83	56,264.35	81,603.16
1912	18,036.99	185,701.21	8,000.00	14,579.82	208,281.03	226,318.02	58,139.15	85,829.74
1913	615.63	188,832.10	30,786.81	17,211.86	236,830.77	237,446.40	61,069.90	85,670.12
1914	18,505.82	188,644.66	51,268.19	32,799.93	272,712.78	291,218.60	66,024.85	104,411.33
1915	968.73	165,604.40	36,666.73	51,949.80	264,220.93	265,189.66	69,598.75	101,561.38
1916	100.63	201,381.96	9,133.27	3,366.59	247,165.32	247,265.95	67,060.41	102,137.45
1917	3,998.17	257,122.56	24,832.25	17,341.11	299,295.92	303,294.09	72,442.07	117,091.31
1918	34,822.20	251,196.62	10,900.00	10,313.91	272,410.53	307,232.73	72,350.13	129,739.63
1919	50,486.38	321,574.55	58,741.18	14,075.95	394,391.68	444,878.06	85,538.31	163,542.19
1920	56,140.44	410,976.78	161,226.57	14,976.59	587,179.94	643,320.38	112,620.15	186,667.14

in all departments of the fair for a period of eleven years:

	1914	1913	1912	1911	1910	1909
Horses	$18,537.50	$15,612.50	$14,940.00	$14,184.00	$10,381.00	$ 7,273.00
Cattle	12,673.25	12,623.00	11,738.00	12,061.00	11,778.00	10,153.00
Swine	4,499.00	4,404.00	4,042.00	3,640.00	4,135.00	3,035.00
Sheep	2,779.00	2,317.00	2,306.00	2,388.00	2,146.00	2,057.00
Goats	----------	----------	----------	----------	----------	----------
Poultry	1,036.50	1,172.50	1,112.50	1,042.00	1,036.00	988.50
Pet stock	----------	----------	----------	----------	----------	----------
Agriculture	5,398.00	4,173.00	4,059.00	3,524.00	3,074.00	2,976.50
Culinary	1,251.00	1,215.00	1,092.50	856.50	798.00	793.00
Dairy	652.00	602.00	627.00	627.00	602.00	596.81
Horticulture	1,680.00	1,614.00	1,139.25	1,115.75	892.00	907.25
Floriculture	1,535.60	1,439.40	1,382.40	1,278.60	945.00	884.20
Textile, etc.	1,183.00	1,658.50	1,662.50	1,744.50	1,753.00	1,812.50
Art	561.00	----------	----------	----------	----------	----------
Educational	931 00	665.00	430.00	493.00	422.00	261.00
Scholarships	425.00	650.00	650.00	850.00	1,000.00	1,000.00
Speed	13,283.00	12,620.00	12,360.00	12,310.00	10,755.00	9,190.00
Dog show	----------	----------	318.00	----------	----------	----------
*Baby health	----------	----------	280.00	----------	----------	----------
Spelling contest	----------	----------	----------	----------	----------	----------
Team judging	----------	----------	----------	----------	----------	----------
Total premiums	$66,424.85	$61,069.90	$58,139.15	$56,114.35	$49,717.50	$41,927.76

*Cups and medals given in place of cash prizes since 1912.

OF AGRICULTURE FOR YEARS OF 1896 AND INCLUSIVE.

Sources and Expenditures, Together With Amount Expended for and Net Profit of Fair for Each of the Years Enumerated.

	Disbursements					Profits of Fair		
	Improvements and Perman't Repairs	Maintenance of Grounds and Buildings	Disbursements Other Than for Fair	Total for Year	Cash on Hand	Total Receipts of Fair	Total Expenses of Fair	Net Profits
1896	$ 7,471.95	----------	$ 14,019.88	$ 58,247.28	$ 152.84	$ 36,622.10	$ 31,807.35	$ 4,814.75
1901	13,378.73	----------	2,313.44	48,821.87	34,244.93	50,712.91	33,129.70	17,583.21
1902	63,457.12	----------	2,608.69	107,875.46	30,372.25	63,084.71	41,809.65	21,275.06
1903	17,855.77	----------	1,704.83	65,363.29	28,963.11	59,838.56	45,802.69	14,035.87
1904	59,641.11	----------	3,195.43	116,013.64	29,657.23	66,100.36	53,177.10	12,823.26
1905	11,963.09	----------	3,345.27	78,447.87	39,976.34	84,786.25	63,139.51	21,646.74
1906	30,035.33	----------	3,385.87	105,440.74	50,394.87	110,929.85	72,459.39	38,470.46
1907	16,459.05	----------	5,043.03	200,654.07	35,327.90	104,356.75	79,151.99	25,204.76
1908	53,663.69	----------	4,975.50	153,231.98	25,328.73	138,764.66	94,593.21	44,171.45
1909	150,208.58	----------	4,379.91	263,814.37	4,985.25	137,307.40	109,225.88	28,081.52
1910	24,360.98	----------	14,740.26	169,332.42	7,283.44	157,259.77	130,231.18	27,028.59
1911	109,755.04	----------	4,429.29	252,071.84	18,036.99	179,549.67	137,867.51	41,682.16
1912	71,056.56	$ 6,575.51	4,101.43	225,702.39	615.63	185,701.21	143,968.89	41,732.32
1913	51,110.85	7,313.67	13,776.04	218,940.58	18,505.82	188,832.10	146,740.02	42,092.08
1914	100,649.13	7,564.86	11,599.70	290,249.89	968.73	188,644.66	172,113.92	16,530.74
1915	46,138.60	6,770.91	41,019.39	265,089.03	100.63	165,604.40	171,160.13	*5,555.73
1916	10,547.28	3,432.77	60,089.87	243,267.78	3,998.17	201,381.96	169,197.86	32,184.10
1917	38,773.77	8,284.47	31,880.27	268,471.89	34,822.20	257,122.56	189,533.38	67,589.18
1918	30,771.08	12,217.77	11,667.74	256,746.35	50,486.38	251,196.62	202,089.76	49,106.86
1919	105,216.08	21,617.51	12,823.53	388,737.62	56,140.44	321,574.55	249,080.50	72,494.05
1920	229,415.93	21,470.40	19,792.12	569,965.74	73,354.64	410,976.78	299,287.29	111,689.49

*Loss.

STATEMENT OF INSURANCE IN FORCE ON FAIR GROUNDS. BUILDINGS AND DATE OF EXPIRATION.

	Fire	Tornado	Premiums	Expiration
General form on frame buildings	$ 60,000.00	$ 60,000.00	$ 2,400.00	1922
Brick horse barns		9,000.00	45.00	1922
Brick horse barns	14,500.00	14,500.00	425.09	1921
Transformer station and contents	2,000.00	1,000.00	43.00	1922
Women and Children's building	15,000.00	15,000.00	367.50	1923
Agricultural building	10,000.00	10,000.00	250.00	1923
Administration buildings and contents	20,000.00	15,000.00	435.38	1923
Stock pavilion	15,000.00	15,000.00	378.75	1923
Machinery hall		15,000.00	75.00	1923
Swine pavilion		13,000.00	65.00	1922
Grand stand		10,000.00	100.00	1923
Farm house	1,500.00	1,500.00	21.87	1922
Farm barn	500.00	500.00	7.13	1922
Brick dining halls	4,000.00	2,000.00	110.00	1921
Street car station		2,000.00	10.00	1922
Sheep barn		13,000.00	71.50	1922
Cattle barn	50,000.00	50,000.00	1,612.00	1923
Residence	5,000.00	5,000.00	70.00	1923
Speed barn No. 1	700.00	700.00	24.50	1923
Three lumber sheds	1,200.00	1,200.00	42.00	1923
Board of Control building	1,100.00	1,100.00	38.50	1923
Total insurance	$200,500.00	$254,500.00	$ 6,592.22	

REPORT OF TREASURER, W. W. MORROW, AFTON, IOWA.

Mr. President and Gentlemen of the Convention:

In accordance with the wishes of the State Board of Agriculture, I herewith present a report of receipts and disbursements for the fiscal year ending November 30, 1920:

	Balance on deposit December 1, 1919		$ 59,882.82
	Received from ticket sales and cash turnstiles as follows:		
170,247	general admissions @ 75c	$127,685.25	
8,997	round-up tickets @ 75c	6,747.75	
20,762	general admissions after 6 p. m. @ 25c	5,190.50	
28,967	children's and half-fare @ 25c	7,241.75	
2,877	campers' tickets @ $3.00	8,631.00	
2,148	exhibitors' tickets @ $3.00	6,444.00	
34	solicitors' tickets @ $4.00	136.00	
18,561	auto tickets @ 50c	9,280.50	
168	taxicab tickets @ $5.00	840.00	
14,926	Sunday, August 29, tickets @ 50c	7,463.00	
3,018	day grandstand (box) @ $1.00	3,018.00	
16,367	day grandstand (reserved lower half) @ 75c	12,275.25	
22,462	day grandstand (reserved upper half) at 50c	11,231.00	
835	day grandstand (children, paddock) @ 25c	208.75	
35,719	day grandstand (paddock) @ 50c	17,859.50	
2,598	night grandstand (box) @ $1.00	2,598.00	
14,134	night grandstand (reserved lower half) @ 75c	10,600.50	
19,218	night grandstand (reserved upper half) @ 50c	9,609.00	
1,097	night grandstand (children paddock) @ 25c	274.25	
36,309	night grandstand (paddock) @ 50c	18,154.50	
	Over on cash turnstiles	16.00	
8,448	night stock pavilion (reserved) @ 50c	4,224.00	
1,907	night stock pavilion (standing room) @ 25c	476.75	
	Total ticket sales		$270,207.25

Received from Secretary and Superintendents as follows:

Secretary's Department:

Fees Stallion Registration Division	$ 4,802.50	
State appropriations	161,226.57	
Miscellaneous receipts other than fair	5,446.65	
Superintendent of Grounds	2,552.92	
Interest on account	2,174.52	
Superintendent Horse Department	2,608.00	
Superintendent Cattle Department	3,014.00	
Superintendent Swine Department	5,101.00	
Superintendent Sheep Department	408.00	
Superintendent Poultry Department	581.50	
Superintendent Machinery Department	15,327.70	
Superintendent Agricultural Department	2,835.00	
Superintendent Dairy Department	4,178.79	
Superintendent Exposition Building	3,935.00	
Superintendent Concessions and Privileges	55,372.17	
Secretary, sale of light and power	686.46	
Superintendent Speed Department	4,643.67	
Superintendent Forage Department	21,750.03	
Association Special Premiums	16,172.75	
Secretary, advertising in premium list	1,151.25	
Secretary, miscellaneous receipts of fair	3,004.21	
Total receipts other than ticket sales		$316,972.69
Grand total receipts		$647,062.76

DISBURSEMENTS.

Expense warrants paid	$459,516.96	
Premium warrants paid	112,582.57	
Total disbursements	$$572,099.53	
Balance on hand November 30, 1920	74,963.23	
To balance		$647,062.76

Respectfully submitted this 8th day of December, 1920.

W. W. MORROW, Treasurer.

December 1, 1920.

To the Directors of the State Board of Agriculture:

Gentlemen: This is to certify that there was on deposit at the Central State Bank on November 30, 1920, a time deposit of $40,000, and a balance to the credit of W. W. Morrow, Treasurer of the Iowa Department of Agriculture, the sum of $34,963.23, making a total credit of $74,963.23.

Yours very truly,

J. W. HAWK, Assistant Cashier.

INVENTORY STATE FAIR PROPERTY

	Value Nov. 30 1919	Depreciation deducted 1920	Improvements added 1920	Value Nov. 30 1920
Real estate	$459,076.19			$ 459,076.19
Real estate, carrying account	122,966.88		$ 17,121.47	140,088.35
Light and telephone system	19,831.13	$ 1,021.48	4,225.55	23,035.20
Personal Property				
Administration Building furnishings	3,715.31	185.77		3,529.54
Amphitheatre chairs	3,001.62	150.08		2,851.54
W. & C. Building furnishings	3,487.28	174.36		3,312.92
Building fixtures (general)	1,971.19	98.56		1,872.63
Office furniture (general)	978.44	48.92		969.52
Tools and equipment	13,237.81	661.89	4,839.55	17,415.47
Live stock (mule team)	440.00	40.00	40.00	400.00
Supplies	4,906.29	245.31		4,660.98
Agricultural Building fixtures	2,614.50	78.44		2,536.06
Wells and pumps	95.83	5.04		90.79
Scales	96.72	4.83		91.89
Buildings				
Administration Building	35,708.22	530.62	344.37	35,521.97
Agrl. Hort. and Dairy Building	45,756.63	686.35	1,097.17	46,167.45
Amphitheatre	94,371.90	943.72	275.24	93,703.42
Art Hall	441.05	22.05		419.00
Auto Garage	41.28			39.22
Boys' & Girls' Club Building	2,786.86	83.61	32.00	2,735.25
Bleachers	9,201.55	552.09	75.50	8,724.96
Band Stand	227.72	11.39		216.33
Barber Shop		127.83		
Boys' Dormitory	2,111.93	63.33	2,491.85	4,539.85
College Building	5,814.42	174.43	107.73	5,747.42
Speed Barn A.	583.08	17.49	820.83	1,386.42
Lumber Shed	583.08	17.49	157.81	723.40
Lumber Shed	583.08	17.49	157.82	723.41
Nurse Cow Barn No. 1	583.08	17.49	75.65	641.24
Nurse Cow Barn No. 2	583.08	17.49	75.65	641.24
Nurse Cow Barn No. 3	583.08	17.49	75.65	641.24
Nurse Cow Barn No. 4	583.08	17.49	75.65	641.24
Nurse Cow Barn No. 5	583.08	17.49	75.65	641.24
Nurse Cow Barn No. 6	583.08	17.49	75.64	641.23
Closet No. 1	280.95	11.24		269.71
Closet No. 29	289.76	11.59	15.19	293.36
Closet No. 18	2,691.39	107.66	15.18	2,598.91
Closet No. 6	113.22	5.66	15.18	122.74
Closet No. 23	2,561.85	102.47	15.18	2,474.56
Closet No. 27	157.85	7.89	15.19	165.15
Closet No. 19	2,626.74	105.07		2,521.67
Closet No. 25	185.16	9.26	15.19	191.09
Closet No. 26	153.34	7.67	15.19	160.86
Closet No. 17	272.97	13.65	15.18	274.50
Closet No. 28	157.85	7.89	15.19	165.15
Closet No. 24	234.96	11.75	15.19	238.40
Closet No. 20	157.86	7.89	15.18	165.15
Closet No. 14	200.73	10.04	15.18	205.87
Closet No. 30	44.67	4.47	15.18	55.40
Closet No. 31	11.21	1.12		10.09
Closet No. 21	29.81	2.98	15.18	42.01
Closet No. 32	59.93	5.99		53.94
Closet No. 22	54.14	2.71	15.18	66.61
Closet No. 33	618.73	24.75		
Cattle Barn New	55.74	55.74		593.98
Secretary's garage	300.00			300.00
Cottage east of Sims house	508.00	508.00		
Chicken coop Sims land	250.00			250.00
Dining halls brick	8,804.31	176.09	148.67	8,776.89
Dining hall Grand Ave.	5,849.74	175.50	8.22	5,682.46
Blacksmith shop	141.06	7.06		134.00
Dwelling Sims land	750.00	750.00		
Exposition Building	23,354.97	934.20	769.46	23,190.23
Farm house	3,421.32	136.85	26.28	3,310.75
Farm barn	1,174.14	46.97	122.88	1,250.05
Floral Hall	1,653.02	165.30	31.50	1,519.22
Forage barn	1,675.34	67.01		1,608.33

	Value Nov. 30 1919	Depreciation deducted 1920	Improvements added 1920	Value Nov. 30 1920
Forage barn Camp ground	34.82	34.82		
Fire Station	545.70	16.37	113.44	642.77
Flag pole	435.59	4.36		431.23
Filling station			113.50	113.50
Grocery store	445.02	22.25		422.77
Grand Avenue entrance	3,959.72	59.40	541.11	4,441.43
Horse Barn, brick	48,386.20	725.79	146.69	47,807.10
Horse Barn No. 1	1,696.69	50.90	198.17	1,843.96
Horse Barn No. 2	1,272.55	38.18		1,234.37
Horse Barn No. 3	1,696.69	50.90		1,645.79
Horse Barn No. 4	1,527.18	45.82		1,481.36
Horse Barn No. 5	1,527.18	45.82		1,481.36
Horse Barn No. 6	1,442.32	43.27	85.22	1,484.27
Horse Barn	1,162.70	34.88		1,127.82
Hospital	741.46	22.24		719.22
Ice house	306.31	15.32	7.00	298.99
Ice house (new)	260.14	10.41		249.73
Judges' Stand	244.01	2.44	9.28	250.85
Judges' Stand (show ring)	11.81	1.18		10.63
Lumber sheds	416.98	20.85	157.81	553.94
Machinery Hall	80,123.19	1,201.85	169.74	79,091.08
Meat market	181.63	18.16	4.00	167.47
Mines and Mining Building	440.32	13.21		427.11
Toilet (camp ground)	73.51	3.68		69.83
Office Building No. 2	307.97	12.32		295.65
Office Building No. 3	147.01	7.35		139.66
Toilet (camp ground)	73.51	3.68		69.83
Toilet (camp ground)	73.51	3.68		69.83
Office Building No. 6	195.42	9.77		185.65
Office Building No. 7	251.10	12.56		238.54
Office Building No. 8	290.56	14.53		276.03
Office Building No. 9	99.54	4.98		94.56
Office Building No. 10	284.25	14.21		270.04
Office Building No. 11	136.29	6.81		129.48
Office Building No. 12	189.82	9.49		180.33
Office Building No. 13	297.17	11.89		285.28
Administration Cottage	195.13	9.76	21.00	206.37
Office Building No. 15	29.40	1.47		27.93
Office Building No. 16	127.60	6.38		121.22
Dining hall (old P. O.)	328.05	13.12	414.66	742.71
Poultry Building	7,629.69	305.19	749.51	8,074.01
Power Hall	5,701.26	228.05		
Police Headquarters	367.55	18.38	5.00	354.17
Paddock, cooling out	8,770.83	175.42		8,595.41
Post office (new)			250.50	250.50
Rock Island entrance	255.39	12.77		242.62
Swine Pavilion	74,275.44	1,114.13	127.81	73,289.12
Stock Pavilion	36,236.56	543.55	70.96	35,763.97
Street car station	7,968.39	79.68		7,888.71
Speed Barn No. 1	1,056.31	31.69	198.17	1,222.79
Speed Barn No. 2	1,056.31	31.69		1,024.62
Speed Barn No. 3	1,056.31	31.69		1,024.62
Speed Barn No. 4	1,056.31	31.69		1,024.62
Speed Barn No. 5	1,056.31	31.69		1,024.62
Speed Barn No. 6	1,056.31	31.69		1,024.62
Speed Barn No. 7	1,056.31	31.69		1,024.62
Speed Barn No. 8	880.25	26.41		853.84
Speed Barn No. 9	880.25	26.41		853.84
Speed Barn No. 10	880.25	26.41		853.84
Speed Barn No. 11	580.37	23.21		557.16
Speed Barn No. 12	538.91	21.56	2.50	519.85
Sheep Barn	24,903.64	498.07	32.00	24,437.57
Shaver Carriage Building	2,784.70	55.69		2,729.01
Secretary's residence			14,717.09	14,717.09
Telephone station	623.59	18.71		604.88
Ticket Booth No. 1	11.04	.55	11.84	22.33
Ticket Booth No. 2	11.04	.55	11.84	22.33
Ticket Booths No. 4 and 5	73.51	3.68	11.84	81.67
Ticket Booths No. 6 and 7	73.51	3.68		69.83
Ticket Booths No. 8 and 9	73.51	3.68		69.83
Refreshment Stand Campers' Headquarters	55.14	2.76		52.38
Ticket Booth Grand Ave.	18.39	.92		17.47
Ticket Booth Quarter Stretch	7.31	.37		6.94
Ticket Booth, Amphitheatre	24.78	.99	15.00	38.79
Ticket Booth, Amphitheatre	45.19	1.81	15.00	58.38

	Value Nov. 30 1919	Depreciation deducted 1920	Improvements added 1920	Value Nov. 30 1920
Ticket Booth, Amphitheatre	31.65	1.27	15.00	45.38
Ticket Booth, Amphitheatre	45.19	1.81		43.38
Ticket Booths, Reserve Seats	33.39	1.34		32.05
Ticket Booth, Stock Pavilion	27.40	1.10		26.30
Ticket Booth, Rock Island Station	58.71	2.35		56.36
Ticket Booth, Rock Island Station	19.57	.78		18.79
Ticket Booth, Amphitheatre Paddock	22.00	1.10		20.90
University Ave. entrance	52.67	7.90	652.50	697.27
Vaudeville stages	1,744.84	69.79	22.72	1,697.77
Women's and Children's Building	75,871.03	1,138.07	453.76	75,186.72
Women's and Children's Hospital Building	87.31	4.37		82.94
Walnut Street entrance	1,302.73	19.54	321.94	1,604.68
W. C. T. U. Building			75.00	75.00
Total Buildings	$687,764.91	$ 28,822.79	$213,982.68	$ 872,924.94

IOWA STATE FAIR BALANCE SHEET.

November 30, 1920.

RESOURCES.

Real estate	$599,164.54	
Buildings	872,924.94	
Light and telephone plant	23,025.20	
Personal property	37,731.34	
		$1,532,856.02
Accounts receivable		2,572.28
Cash balance in treasury November 30, 1920		73,354.64
Total resources		$1,608,782.94

LIABILITIES.

Accounts payable		$ 34,595.01

SURPLUS.

State appropriation for frame buildings, 1885	$ 50,000.00	
State appropriation for real estate	84,611.47	
State appropriation for permanent buildings since 1902	596,000.00	
Increase in value of real estate and profits of fair invested in permanent improvements	843,576.46	
Total surplus		$1,574,187.93
		$1,608,782.94

The President: The next order of business is the final report of the crop estimate for 1920 by Charles D. Reed, Director of the Iowa Weather and Crop Service Bureau.

Charles D. Reed, Director of the Iowa Weather and Crop Service Bureau: I feel a little bit more like coming before this meeting at this time than I did a year ago today, when the temperature was 19 degrees below zero and the trains were all tied up. Today it is 35 above.

FINAL CROP REPORT OF THE STATE OF IOWA, 1920.

The following estimates of acreage, yield and value of the crops of the state, derived from the reports of hundreds of correspondents well distributed in each county, are the result of the joint effort of the U. S. Bureau of Crop Estimates, of which Mr. Frank S. Pinney is Agricultural Statistician, and the Iowa Weather and Crop Service. The table showing the total value of crops does not include or take into account live stock products.

Corn.—The estimated acreage was 10,300,000; average yield, 46.0 bushels per acre; total yield, 473,800,000 bushels; average price, 47 cents per bushel; total value, $222,686,000. Only 10 per cent of the crop was reported to be soft or immature and 77 per cent had been husked on December 1. The total production of corn in Iowa this year is the greatest on record. The quality is very good.

Oats.—The estimated area harvested was 5,893,600 acres; average yield, 39.0 bushels; total yield, 229,850,400 bushels; average price, 36 cents; total value, $82,746,144.

Spring Wheat.—Area harvested 400,000 acres; average yield, 11.3 bushels per acre; total yield, 4,520,000 bushels; price per bushel, $1.35; total value, $6,102,000.

Winter Wheat.—Area harvested, 431,000 acres; average yield per acre, 19.7 bushels; total yield, 8,490,700 bushels; average price, $1.41 per bushel; total value, $11,971,887.

Barley.—Area harvested, 284,000 acres; average yield per acre, 27.5 bushels; total yield, 7,810,000 bushels; average price, 63 cents per bushel; total value, $4,920,300.

Rye.—Area harvested, 80,000 acres; average yield, 16.2 bushels; total yield, 1,296,000 bushels; price per bushel, $1.17; total value, $1,516,320.

Flax Seed.—Average yield, 10.0 bushels; total yield, 120,000 bushels; total value at $1.80 per bushel, $216,000.

Timothy Seed.—Area harvested, 270,000 acres; average yield, 4.9 bushels; total yield, 1,323,000 bushels; total value at $3.00 per bushel, $3,969,000.

Clover Seed.—Area harvested, 134,000 acres; average yield, 2.0 bushels; total value at $11.65 per bushel, $3,122,200.

Potatoes.—Area harvested, 104,500 acres; average yield, 110 bushels; total yield, 11,495,350 bushels; average price, $1.22; total value, $14,024,327.

Hay (Tame).—Average yield, 1.44 tons per acre; total yield, 4,349,620 tons; average price, $16.24 per ton; total value, $70,637,829.

Hay (Wild).—Average yield, 1.27 tons; total yield, 647,700 tons; average price, $12.69; total value, $8,219,313.

Alfalfa.—Area harvested, 200,000 acres; average yield, 2.84 tons; total yield, 568,140 tons; average price, $19.23 per ton; total value, $10,925,332.

WEATHER AND CROP REVIEW.

All reference in this publication to the effect of weather on crops is the result of cooperation between the United States Weather Bureau and the Iowa Weather and Crop Service.

Winter set in early and severely, preceding the crop season of 1920. For the three winter months the average precipitation was the least of record, but that of the early winter fell mostly as snow, giving ample protection to winter grains and grasses during the rigorous, record breaking temperatures of early December. Under the snow covering, the ground froze very little, though cold weather was practically continuous till after the middle of February. There were considerable periods without snow covering in the south central and southeast districts and extending a few counties northward along the Mississippi and Missouri rivers. About 6 per cent of the winter wheat was winter killed, which is less than the average.

March was wet, warm and windy. The snow cover disappeared in the northern portion about the middle of the second week, having been continuous there since November. By the end of the third week frost had left the ground. Several wind storms seriously damaged farm buildings. The ground was too wet for much field work.

April was cold and wet with a snow storm in the southern third of the state on the 3d-4th. It was too cold for plant growth and too wet for field work. However, a larger oats acreage than last year was sown in the larger producing counties of the west and northwest portions of the state. In the wetter, later, southern districts, oats seeding was prolonged unusually till as late as the middle of May. The development of fruit buds was beneficially delayed by the cold weather.

The season continued cool till about May 20, when a warm spell set in that brought vegetation forward rapidly. Field work progressed slowly, particularly in the south central and southeast districts, where much corn was yet to be planted at the close of May. The most advanced section was the upper Raccoon river watershed where corn planting began about May 4 and was finished before the close of the month. In Union and portions of adjacent counties not more than one-third of the corn had been planted up to June 1. Fruit bloomed generally about the middle of May, with conditions favorable for pollenation. Peaches in the southern tier of counties showed more bloom than for the past seven years. Young live stock suffered greatly from the cold, wet, cloudy spring.

June was warmer and drier than usual in most sections of the state. The week ending June 15, with a mean temperature of 80 degrees, was the warmest week of the entire season and the warmest June week since June 3-9, 1911. The humidity, however, averaged 20 per cent lower than during a similar hot period [illegible] with the result that diseases of small grains were much less prevalent, though causing considerable damage to spring wheat in the west central and northern counties. The following week averaged 15 degrees cooler and was very beneficial for small grains, which were in or approaching the critical heading and blooming period. All crops improved during June but were still below normal development on July 1. More than half of the July rainfall occurred during the first week. Temperatures though generally below normal were high enough, in connection with the heavy rains of the first week, to cause rapid development of diseases of spring wheat which for the second year in succession was almost a failure in the western and northern counties. Hail storms were unusually prevalent the first half of July. The greatest damage, approximating $100,000, occurred in Scott county on the 9th.

Harvest and haying weather was generally favorable. Though oats got a bad start and looked unpromising till late in June, they made a remarkable showing at harvest and threshing time. The yield was above normal and the quality good. At the close of August, 91 per cent of the small grain had been threshed, which is 20 per cent more than normal and the largest in the last ten years. Winter wheat yield was good though slightly less than the ten-year average. Spring wheat was disappointing.

From July 14 to September 8, temperatures were almost continuously below normal. As a result, corn became more and more backward, so that by September 7, the bulk of the crop had only reached the hard dough stage and was considered to be three weeks late. Reports from hundreds of correspondents on September 1 indicated that with normal weather only 42 per cent of the corn would be safe from frost by September 20. But the unexpected happened in that abnormally warm and dry weather, September 9-27, forced the corn to mature rapidly, so that when killing frosts came from September 29 to October 1, they did not damage more than 10 per cent of the crop and this was easily absorbed by feeding on the farms. Killing frost did not visit the southeastern counties till October 29. The corn crop of 1920 is the largest ever produced in Iowa and the quality is very good. Warm and generally dry weather in October dried the corn so that husking made good progress during the last half of the month, except in the north central counties where locally heavy rains and warm weather made cribbing in large quantities unsafe. At the close of November, corn husking was 77 per cent finished. "Hogging down" corn averages 7 per cent this year as compared with 8 per cent last year.

The cool summer was very beneficial for potatoes. The yield per acre averaged 110 bushels, which has been exceeded but twice in thirty years and the total crop is more than twice that of last year on less acreage. It is rather rare that a bumper crop of corn and a bumper crop of potatoes are raised in the same year.

Fruit, truck crops, sugar beets, pop corn and sweet corn were all good crops.

Soil conditions were generally favorable for seeding winter wheat during September and in some counties the acreage was increased over that harvested this year. Growth continued till checked by the abnormally cold weather of November 9-17. Of the acreage seeded, 90 per cent made good growth and became well established; 8 per cent germinated but made little showing above ground; and only 2 per cent did not germinate up to the beginning of winter. Fall plowing made good progress till checked by dry weather in October.

TABULATED CROP SUMMARY, 1920.

Crop	Acres	Average Yield	Average Price	Total Yield	Total Value	Total Yield 1919	Total Value 1919
Corn	10,300,000	46.0 bu.	$ 0.47	$ 473,800,000	$ 222,686,000	$ 416,622,000	$ 487,447,740
Oats	5,893,600	39.0 bu.	0.36	229,850,400	82,746,144	196,391,500	125,690,560
Spring Wheat	400,000	11.3 bu.	1.35	4,520,000	6,102,000	7,145,300	13,504,617
Winter Wheat	431,000	19.7 bu.	1.41	8,490,700	11,971,887	16,508,600	32,687,028
Barley	284,000	27.5 bu.	0.63	7,810,000	4,920,300	8,022,800	8,905,308
Rye	80,000	16.2 bu.	1.17	1,296,000	1,516,320	1,110,050	1,476,366
Flax Seed	12,000	10.0 bu.	1.80	120,000	216,000	152,275	593,872
Timothy Seed	270,000	4.9 bu.	3.00	1,323,000	3,969,000	900,000	4,419,000
Clover Seed	134,000	2.0 bu.	11.65	268,000	3,122,200	84,000	2,093,280
Potatoes	104,500	110.0 bu.	1.22	11,495,350	14,024,327	4,942,110	9,587,693
Hay, Tame, excluding Alfalfa	3,020,850	1.44 tons	16.24	4,349,620	70,637,829	4,957,370	91,066,887
Hay, Wild	510,000	1.27 tons	12.69	647,700	8,219,313	631,693	10,410,301
Alfalfa	200,000	2.84 tons	19.23	568,140	10,925,332	477,314	11,021,180
Pasture and Grazing	10,137,680	----------	7.01	----------	71,065,136	----------	100,000,000
Ensilage, estimated	----------	----------	----------	----------	25,000,000	----------	20,000,000
Sweet Corn, subject to revision	----------	----------	----------	----------	1,960,000	120,000	1,620,000
Pop Corn	30,000	30.0 bu.	3.23	900,000	2,907,000	729,570	2,765,070
Buckwheat	7,500	17.0 bu.	1.34	127,500	170,850	98,000	191,100
Fruit Crop, estimated				----------	7,000,000	----------	7,000,000
Garden Truck, estimated	----------	----------	----------	----------	4,000,000	----------	8,000,000
Sugar Beets for Manufacture	17,250	9.2 tons	11.34	158,750	1,801,000	64,000	576,000
Miscellaneous Crops, estimated	----------	----------	----------	----------	5,500,000	----------	11,000,000
Total value, not including live stock products, for the year 1920	----------	----------	----------	----------	$ 560,460,638	----------	$ 950,056,002
Total value for the year 1919	----------	----------	----------	----------	$ 950,056,002	----------	----------

The President: The next topic on the program is an address by DeWitt Wing, Editor of the Breeders' Gazette, Chicago, Illinois, upon the subject of agricultural affairs. I just received a telegram from him, stating that it will be impossible for him to be with us today.

No doubt a great number of you gentlemen have visited the Iowa State Fair and have admired the beautiful flowers, vines and shrubbery around the buildings and upon the grounds. I think you will be interested in hearing from the man who made the plans and supervised the planting. I take pleasure this morning in introducing to you the landscape architect for the Iowa State Fair, who has this work in charge, Mr. L. E. Fogelsong.

Mr. President, and Gentlemen:

The existence of many small fairs throughout the United States today is problematical. They have been tottering in many instances until, from the lack of funds and active help, they are slowly going under the hammer and returning to farm purposes. I am sorry to say that this has been true of a few in our very wealthy communities.

County fairs are of an educational character and deserve to rank with our higher institutions of learning, and they are deserving of the most generous help from our legislative bodies. With such help they would quickly arrive at the proper place they deserve in our respective counties.

A fair to properly fulfill its function should have two purposes uppermost in its mind and in its principles—the first is educational, and the second is a stimulation for something that is higher and something that is better. Now, I put those two on an equal basis, and they more or less merge, as you well know.

The London Exposition of 1850, which is quite well known to all people actively interested in history of fairs, was built for the stimulation of national trade, and in that it was successful. It also marked a big step in fair building, for they built there the original Crystal Palace, which was later perfected at Philadelphia in 1876, and it was in working over the engineering problems of this work—they had no steel in those days, and to build a crystal palace was quite an engineering feat—and it was over the development of these plans that the prince consort, husband of Queen Victoria, really contracted his ill-health from which he later died. The fair, however, was very, very successful, and they did succeed in stimulating foreign and national trade.

In the fair in 1876 at Philadelphia it had two bases—first of all it was educational, we were showing to the world what we were as a nation, besides it being a Centennial commemorating our independence. It educated the world what we really were, and it convinced them that our democracy was a success, a thing which England was unable to understand. They couldn't understand how we could have a democracy such as we had and still live together and prosper; and so our Centennial in

1876 showed to the world what we were doing in the way of manufacturing and production in all lines.

That exposition of 1876 had live exhibits, and it was really the last exposition to have live exhibits. Later they came in with dead material—that is, material not in operation. And this, you see, educated the world as to what we were, the point to which we had advanced in our civilization, and it stimulated in our own people a desire for many more decorative features in our homes. And here is a very important fact about what they did do. Up to that time the decorations in our homes were somber—the parlor was locked up except when company came to the house, and the rest of the home was of the same general character. The Philadelphia Exposition was garish, it had color, and today in our homes we find large gilt frames, which are nothing more or less than the outcome of that exposition. It was a stimulation; it was not for the best, maybe, but it was certainly for something better than we had.

Our homes shouldn't be somber; we should be happy, and our colors should be light, and those colors all affect us psychologically.

In fair ground planning, which is a part of my subject, the same thought should be followed and put into execution. By that I understand it to mean the proper arrangement of buildings on the grounds. Among other things, they should be arranged so that all of the buildings that are of allied interest should be very closely grouped together. And for that we have a practical reason. If you have a man intensely interested in livestock, and there is where he is going to spend most of his time, he can do that most conveniently if all of your livestock buildings are close together. Another thing, when you have him down there you have him out of the way of cross traffic; and the better you can distribute your crowd and distribute your interests, collecting into a group the allied interests, the better your traffic is going to be.

At the state fair grounds in our traffic we have one of our greatest problems. The streets appear narrow when crowded with vehicles during the fair, but go out there when the crowd isn't there and the streets appear very wide. They are wide. As you all know, the point of greatest congestion is in front of the grandstand, for there traffic is continually being held up by pedestrain cross-traffic, and I know in the plans that we have been working on during the past year—but which have not been presented because some thought they might appear a little radical—still, I believe these things are solved. Some streets are being built anew, and some are to be widened, and the pedestrian traffic on others restricted. It is sometimes necessary to make radical rules governing traffic, and so we will inaugurate one-way traffic for automobiles on some streets, and others will be closed to vehicles in times of greatest pedestrian cross-traffic.

Here is an example: When the amphitheatre lets out it is almost impossible for people to get down Grand avenue in their automobiles, but if there was an underground viaduct there, this vehicular traffic could go on unimpeded, and that is very essential.

But where it is a maximum utility, you must plan and you must arrange your buildings. And while I am absolutely in favor of you getting the maximum state aid in every way, if it were in my power to restrict it, I would put this prerequisite upon you people—I would ask that you have a plan and that everything you did in the future should be done with that plan in mind. It will cost no more to build and locate your buildings according to some future definite arrangement, something that you will be proud of as an individual when you do arrive at this place where you belong.

Great expositions employ the aid of the best architects, engineers and landscape architects procurable to make of their fairs the most beautiful, stimulative and educational possible. If success has crowned their efforts, as I am sure you will agree with me that it has, then in a small way at least I would recommend their procedure to you. By that I mean, "be advised," and build by a definite plan of development.

As I said before, you really rank as an educational institution, hence in the planning of your institution you must have something that is dignified, something that will stimulate the imagination. You cannot stimulate the people that come to your county fair of something that is better and more beautiful unless you have those things there before them.

When it comes to planting your grounds with flowering plants and shrubbery, because fairs come at that season of the year, it is very difficult to supply you with a great variety of blooming plant material. There aren't many shrubs that are blooming in August and September, although there are a few, and I know in the planting of the fair grounds today we are using only plant material that will have some value at that particular time. If you do not have flowers, you must have some kind of interesting foliage or fruit, and it is surprising the great dearth of material suitable for that time, but I have worked out a list and if any of you people would be interested in getting a copy of that list I will send you a copy, but it is just those things that are of interest at fair time.

For instance, dogwoods have beautiful fruit at fair time. Into this planting, I have thrown some colored foliage. That is apt to be garish if you use too much of it, but you can intersperse some of it to liven the effect, and at a distance it looks as though the shrub were blooming. And also, in the use of flowers, we use a great many annuals—cannas, salvias, and materials of that kind which, by some people who are really very much considered authority, are taboo. They are taboo because their colors are too bright and garish, but they do supply on our fair ground planting scheme a lot of color, and it is the spirit of the day that the country girl will come wearing her brightest ribbon, and the spirit of the planting should be in the same character and harmony. There is sympathy there, as you can see.

This fall we planted a great many perennials, which to me is an absolutely new feature. Your perennials will be planted once, and then they are there for all time to come. We have planted those things which will bloom at fair time, such as phlox and black-eyed Susans, and plants of that kind, and in that way we are trying to make our fair grounds out here more beautiful, and I know in years to come we will have the most beautiful grounds in the United States.

And when we do have our grounds the most beautiful in the country, we are going to have it right here in Iowa, because we deserve it, we are the richest state and have the best right to own such a fair ground. We have the many interests that come in here to make up a very large exposition of this character, and I would like to make this point in closing and leave this thought with you, that you people deserve to have a fair in your community that is ranking with our highest educational institutions, therefore, you deserve all of the state aid that you can secure. And I can assure you that as time goes on your state aid is going to be increased, but, as I said before, the increased state aid ought to be given to the fair that has character.

The President: On account of the absence of Mr. DeWitt Wing, we have not consumed quite all of our time for the forenoon program, so I take this opportunity of introducing to you a gentleman who has taken an active part in agriculture in Iowa, who was connected with this great institution for several years, and who is keeping in touch with conditions as they improve from year to year. I take pleasure in introducing to you my particular friend, John Cownie.

Mr. President, Fellow Farmers:

Perhaps you will want to draw a line against me now because I am out of farming actively, but my interests are still there.

I want to remind you younger men especially of this—the older men of course have heard this story as told by Judge Wright, one of the early pioneers of Iowa, and one of the warmest, staunchest friends of the agricultural society, in an address that he gave many years ago. He told us about the formation of the society. Iowa was then a young state and there had been no state fair. Judge Wright at Davenport had sent to Connecticut for seed onions which he planted in Scott county and had excellent results. Thinking that the people back in Connecticut might be interested in the onions that he raised, he carefully selected and packed a box of his onions and sent them to his old friends in Connecticut to let them know that we had an agricultural society in this state west of the Mississippi that could grow onions. When the box arrived there they crowded around to see what was in it, and when the lid was taken off and the onions exhibited, they broke and run for their lives, thinking that the box was full of infernal machines—they never saw such onions as were grown in Iowa. That is one of the stories that Judge Wright told about the organization of the state agricultural society.

When the society was to be organized, a notice was sent out and published in the newspapers that a meeting would be held in a certain town on a certain day for the purpose of organizing into an agricultural society. When the day of the meeting came, three men appeared, and one had ridden fifty miles on horseback to attend the meeting; but that was their first meeting held to organize the state agricultural society, but they proceeded to business They weren't as discouraged as the farmers are now. They immediately appointed one man, a large, portly man, as president; a little man as secretary, and the medium-sized man as vice president. They talked about organization of a state fair, and finally when they thought they had completed their business the request was made that the secretary should write up an account of the meeting to be furnished to the few newspapers then being published in Iowa, to let Iowa know that there was going to be a state fair and that the state agricultural society had been formed. The secretary got out his pencil and started writing, and he wrote along for a while very industriously, and finally the president said, "You are getting that too long, aren't you? Just read it to us." And the Secretary read, "A large and respectable meeting of the Iowa Agricultural Society was held at Cedar Rapids on the 3rd day of June——"

"Hold on, hold on," he says, "There are only three of us here." The secretary said, "That's right; this is a large and respectable meeting—you're large and I'm respectable." (Laughter.)

Now we can see that the fair grows until it is one of the greatest in the United States—we know that. Judge Wright told us that they held the fair on wheels for many years, being held in different parts of the state, and many times it rained all night preceding the fair. The judge, who was president of the fair, would get up early and walk around the grounds and look after the few exhibits. At one of these fairs there was a farmer that had brought a bull that looked very downcast. During the night it had rained torrents, and in the morning when Judge Wright got there he found that the bull had walked round and round a tree to which he was tied, making a pathway of mud and manure knee-deep, and he was lying down in that muck. The farmer was trying to clean him off when the judge arrived, and the judge said, "My friend, it is a little discouraging to have such bad weather, isn't it?" and the farmer said "What can you expect when you have an old crippled lawyer for president." (Laughter.)

That afternoon they had a number of speeches, and in front of the platform was an old farmer. Judge Wright commenced his speech which he had prepared welcoming them to the great Iowa State Fair, and this farmer kept edging back farther and back and back—he apparently didn't want to stand up so close, and he finally disappeared entirely.

I was on the board of agriculture back in the 90s when everything was lower in price than it is now—it was worse than it is now. The first duty that was assigned to me when I was elected was to sign notes. I signed notes for $20,000. I didn't know the financial condition of any member of the board, but I signed the notes, and I made up my mind I would do everything in my power to get the society out of debt, and I stayed with it until it was out of debt, and we redeemed every obligation with 6 per cent interest. (Applause.) Some of the exhibitors who were holding premiums that had been awarded them would have been glad to get the principal, but I said, "Gentlemen, let's advertise in the papers that we will redeem every obligation of the society, from the date of the obligation with 6 per cent interest," and they agreed, and you see the result today. Our society's paper is not going begging today. No paper is outstanding and we have no obligations at the bank.

But we have fallen on evil days; we have had such times before. We have been high up the last few years. We have had a war in Europe and prices have been way up. My thought goes back to the time when I was a boy, back in the 50s. We sold hand-shelled corn, piled up so high in the basket that it ran over, and it was put through a fanning mill so that it would bring the very highest price, and it sold for 12½ cents a bushel, and, at that, we took it in trade. Oats 10 cents a bushel. As a boy I carried things from home to market—a basket of eggs on one arm and butter on the other—the best butter I ever tasted. We had only one cow, and there wasn't a great deal of butter made from one cow on prairie grass. We didn't use a great deal of butter ourselves; we kept it for sale, and that butter was prepared by mother—mother cared for the cream and I drove the churn, and I make the statement today that I have never tasted such butter since—I suppose because my mother made it and because my appetite was better in those days than it is now. And I sold that butter at 5 cents a pound, and eggs at 3 cents a dozen. And rich we were at it. And I sold all that stuff for 72 cents at the market, but 3 cents was worth as much then as 72 cents is today. How we grew potatoes. The brush soil is the very finest kind of potato ground. I drove the breaking plow, and then would follow the furrow and drop in the potatoes. In the fall all you had to do was to turn the furrow over and there lay the potatoes. We picked them up by hand, took them to market or from house to house, and how much did we get for them? Fifteen cents a bushel, or 5 cents for a pail full—we counted three pails to the bushel. The good housewife would bring her pail to the side of the wagon and I would shovel them in with my hands, and we would get 5 cents a pail for them.

Now what do we have to complain of? What do we have to complain of in comparison to those times? A few of you young fellows don't know what it is to be hard up. (Applause.) You never went through those experiences, and I hope you never will. But there is nothing discouraging to agriculture in Iowa today; not a thing to discourage us. Of course we have low prices in comparison to what we had, but there was a time for years, and years before the world war began, that we considered 50 cents a pretty good price for corn, and we considered 30 and 40 cents a pretty good price for oats; and wheat, we have practically ceased to be a wheat-growing state, we cannot compete with Canada and Minnesota and the Dakotas in the raising of wheat; but there is no necessity for abandoning the raising of corn and the feeding of corn to our hogs. And while prices are declining now, we are just laying up for future good times. I remember a German neighbor of mine back in the 90s speaking of prices, people weren't buying and there was practically nothing moving at all, and I was complaining with regard to conditions, and he says, "John, that's all right; that's all right; the country is getting rich now. Everybody is economizing, everybody is saving; the last few years everybody was spending and everybody was getting poor, but now we are economizing and saving, so that we will have good times again." That is what we are having now, and it will be but a short time until we have good times again and plenty of money. Instead of extensive farming, I want to see intensive farming in Iowa. (Applause.) I don't want to see one farm spread over so much territory; I want to see fewer acres in crop and more acres in grass. The Almighty has favored us in a remarkable degree in giving us the clover plant. We talk about nitrogen, and you buy the advertised fertilizer, but we have in clover everything that brings food for corn, for oats, and for timothy and blue grass, and it is brought up from the underlying clay that you cannot reach by any other means.

A good many years ago I was digging a well in a pasture field that was thickly set with clover, and I had to dig that myself, and I went down 16 feet and noticed some roots right down in the clay 16 feet from the surface, down where there was an abundance of water. I followed that root to the surface and found that it belonged to the clover. The clover was green on the surface, while the timothy was all dried out, the blue grass was dried out. I had noticed before that the clover was green while the other grasses were dried up, and I didn't understand why that should be. The reason is that clover is a long-rooted plant, while timothy and blue grass, being a shallow-rooted plant, soon dry out in dry weather. I carefully dug up that clover root and later wrote an article to the Iowa Homestead and said that I had made a great discovery. A little later I read an account of another clover root. In building the Grand Trunk railroad in Canada, the engineers doing the excavating had found a clover root down in the clay 45 feet. (Laughter.)

There is the plant, you should utilize it. Corn doesn't go down with its root 16 feet; neither does oats nor timothy nor blue grass; but if we will only utilize more clover you will be amply repaid. Every one of you knows that along the public highway where there has been a cut made and the clay is forced to the surface, you will not find timothy or blue grass growing there, but you will find red clover there and doing well, and it feeds on clay. All you need is the clover plant, which the Almighty has given us to bring the food to the surface.

Don't be discouraged; don't join that great army of grumblers that American agriculture is going to the bow-wows. We have every reason to boost; we have our state fair and the great agricultural college, and all of the instrumentalities to encourage farmers, so put your shoulders to the wheel and boom agriculture for all it is worth. Make up your minds that the corn crop of Iowa is to be not only 40 bushels per acre, but let's make up our minds that it shall be 60, 80 and 100 bushels to the acre, and let's boom Iowa and boom agriculture with all the strength we can give. (Applause.)

The President: This completes our program until afternoon. We stand adjourned until 1:30.

WEDNESDAY, DECEMBER 8.

Afternoon Session, 1:30 P. M.

The President: The first address this afternoon will be given by Miss Ethelwyn Dodson, Ames, Iowa, on the subject of Practical Demonstrations for Women at Fairs. I take pleasure in introducing to you Miss Dodson, because she has been a great worker in this field.

Mr. President, and Gentlemen of the Agricultural Society:

Three years ago, Mrs. Snyder, who had charge of the women's work at the state fair in our own state, wrote to Iowa State College and asked Dean McKee if she could send some one to her who could put on a clothing program for women. She said a great deal had been done along the line of fruit, but up to that time they had not emphasized the clothing side for women. As you rememebr, that was just in the early days of the war when we were quite concerned on the subject of clothing because we were asked to meet so many different situations. So we put on last year a series of programs which we advertised as a Style Show.

Before I tell you of that particular piece of work, I am going to tell you of the type of work that women need. Women are vitally interested in all subjects pertaining to the home, and the subjects in sequence are, first, home management; second, the health of the home—and health is taken care of from the standpoint of feeding the family; and, third, the clothing of the family. Then the outdoor features she is interested in are landscaping and poultry.

Now, in order to carry on such a program as I have mentioned, it is necessary for the fair management to cooperate with a number of different factors. For instance, we have in our own state college an extension department. They have their division of home economics. We have, of course, our extension service, and through the extension service and staff of specialists under Miss Knowles, we are able to carry on a number of different programs throughout the state at the fairs, and those fairs have taken advantage of the various facilities at hand. Also, besides cooperating with our state college, we have the women's clubs of our various communities, which are women ready to cooperate with the fair management, providing they have the opportunity.

Then, the local merchants are very, very good about cooperating. It is necessary to cooperate with the merchants if you wish to carry on a program along clothing lines, because the merchant has all types of materials which are necessary to promote the program. For instance, if you were putting on a clothing program, and you are demonstrating points on the construction of cloths, you are first interested in developing the design. The merchant can give us a number of pieces of materials of various colors, and then he will furnish the patterns, and you are able to talk on design or color, then on cutting, then on fitting, and from that you are able to develop your work. Without the cooperation of the merchant it would be impossible to have enough different types of materials to carry out this work satisfactorily.

Then in the name Style Show, a good many people object to the term Style Show. I have found a number of men who object to Style Show, saying that it will be dubbed as a feature simply from the fashion standpoint, but nevertheless, we have not been able to find a better term than Style Show—it is the best advertising word that we can use, because down on the farm as well as in the city all women are interested in fashion shows or style shows, and that particular term is remarkably good from an advertising standpoint. You can bring out any point you wish to convey when you speak of Style Show. It need not be merely a fashion review; you can bring out all pointers relative to it, including sane and wise expenditure of money.

Then under the home management feature, there is a great deal to be said along that line. So many homes are not managed as efficiently as is the farm. On the farm you have a division of labor; you have certain people doing certain jobs and doing those certain jobs well; while in the home certain ones do just exactly what they want to do at the time they want to do it, and consequently the work is not organized as well as it should be. If a demonstration were given on the division of labor by the various members of the family, it could be made very, very interesting, indeed.

The subject of food nutrition has been taken up year after year, which is something of vital importance to the family. Many times we are tired of cooking and don't want to have to learn how to cook—we want to get away from cooking while at the fair. The nutrition and the work of caring for under-nourished children is very interesting to parents having children.

House furnishing is very interesting to women. Last year Miss Tucker put on a very clever demonstration, putting on a room furnished as the average farm home is. This room contained tables, chairs, etc., and by rearranging the furniture and rehanging new draperies, taking down pictures unsuitable for the farm home and discarding several calendars, etc., and substituting a few attractive draperies and refinishing some of the furniture, she wound up by having a very attractive, lovable living room. Features of that kind are very interesting indeed. We are all interested in knowing how to best hang pictures, and how to get better color in our homes and make the home more beautiful. And the homes that are more beautiful, are usually more happy than those that are untidy or where no thought is put to that end.

Then the costume planning work, which I mentioned before, is a very interesting subject. There are so many things you can bring out in that. As I said in the beginning, the program we chose to call our Style Show has great advertising possibilities. Women are interested in matters pertaining to dress, and we can give them very valuable demonstrations. We think they should be interested in better buying. You must give the people the things they want. For instance, the country woman and the town woman are interested in having becoming clothes. That is a feature that we know they are interested in, and so we try to show them clothes and designs that are becoming to different types of women. Through the use of living models which were used we were able to show points on thrift and better buying, as well as design and style. Also it is very interesting to country children to give a fashion review, for it gives the mothers pointers on the better garments, the selection of garments for school and Sunday wear. It also covers the apparel for high school children. High school girls are usually harder to clothe than at any other age, because they know more about it than we do, and sometimes we are not keeping pace with our high school daughters, and it is very instructive to give a program covering high school dress during the specialist week.

Clothing specialists from 33 states in the Union met in Ames two weeks ago and during that time we put on a style show ballet, which we called the High School Girl's Clothes-line. It was a distinct success, and can be gotten by writing to Miss Katherine McKee at Ames. It is demonstrated by living models that step onto the stage and go through certain poses.

Then, we are able to carry on the work by means of posters and also the program for business women. That is, the school teacher, the shop girls and stenographers, and girls in various lines of occupation. Then we have matrons' programs, which is of vital importance. This is a program that we always attempt to give on the largest attended day. In this Style Show we try to have matrons of all kinds, matrons young, matrons old, matrons slender, and matrons stout. We try to have styles for all ages and for all lines and figures.

The garment construction programs are of great importance the last few years, because ready-to-wear garments have been so tremendously expensive. Because of that a great many people have become interested in making their own garments and are anxious to know just as much about clothing construction as they are able to obtain.

You have perhaps thought that people coming to the fair would not take the time to stop and get instruction along the lines I am mentioning, but if you have space and seats where they can sit down and listen, they will sit and listen for hours, and then afterwards talk it over.

Another thing we do is to demonstrate the making of a dress form. We have a matron stand, and with the use of adhesive paper, such as is used in the stores for wrapping bundles, we are able to make a dress form which is the exact duplicate of the person upon which it is made, and it is then finished up with shellac and mounted.

Then we show pattern work and the building of dresses, the finishing, and those things that the woman of the house is so very much interested in.

Then the subject of hats and shoes is also taken up. The selection of hats for various times and places is gone into. We are sometimes led to believe that men do not require mirrors in dressing, but I have noticed in going into men's apparel shops that men spend as much time trying on different styles of hats before a mirror as women do. The matter of hats, for a woman, is a vital thing, and we assist them in choosing those styles which are particularly adaptable to their requirements.

Besides the selection, we take up the care of the garments. Then it comes to shoes, and we emphasize particularly good taste in shoes. Last year Dr. Means came to me after one of my programs and said, "I want to criticize you for the style of shoes you are wearing." Here I was putting on this program and criticizing shoes, while I myself apparently did not have the correct shoe. I had sensible heels and I thought that I had a correct shoe, so it behooves one who is standing up there advocating good taste in dress to know whereof he speaks. Mine are all right, now. (Laughter.) If you are advocating good taste in dress, you must also stand for correct style in shoes. If you go down to one of the shoe shops and tell them you want correct shoes for all your models, they will give them to you. I went down to one of the shoe men in our town and said that I wanted shoes for our models, and he replied, "I will furnish you correct shoes for every model at the Style Show, for we feel that it is one of the biggest advertising features we can promote." So the next occasion I had to put on a program of this nature, I asked one of our Ames merchants to furnish the shoes, and he said "Certainly; I'll be glad to furnish you the shoes for all your models." You see, the merchant is willing to cooperate with us, because of the advertising he gets. If he can say to the customer that comes into the store, "This is the type shoe that they showed down at the Style Show," that is good advertising for him. And the same applies to clothing models.

Then the health work can be taken care of by your fair programs by cooperating with your local Red Cross and the local physicians. The local Red Cross and physicians have done wonders in helping to improve child health, and there are many children who anticipate from year to year going to the fair and having their weight taken and their improvement noted. Of course, this applies more particularly to children who are six or seven or eight. They are interested in their improvement and gain, and the parents are also interested. If they aren't interested, they should be.

I think child culture is becoming popular in fair work, and I am so glad that something is being done to improve the human family by the fairs. I can remember on my grandfather's farm not so very long ago where he had all sorts of poultry running about, with no particular kind or breed. Then there came a change to better stock and better poultry—the result of educational features offered by the fairs. If that is done by the fairs, isn't it just as important for the family to have better health; and isn't it a bigger undertaking for the future to promote better health and better family life, than it is to promote better farm livestock?

The gardening work is of interest to the farm woman from the standpoint of getting out doors. She is very much interested in gardening. We can all remember the gardens we had planted—we all have our pet hobbies of planting things, and it takes years and years to get the garden down to a most efficient basis, and we are always interested in finding out the better schemes and the more scientific ways of doing things.

I listened to a demonstration of poultry put on by a group of girls club workers in our state, and I came to the conclusion that the three little girls and two little boys that gave the demonstration on poultry knew more about poultry than my mother did who had poultry on the farm for years. These children have made a study of it and were interested in it, and were doing a great deal toward bringing about better poultry in their community, and the poultry demonstration is of great value to the fair. It means a great deal to the community to know how to go about it to raise better poultry.

This concludes what I have to say about the demonstrations for women. Are there any questions you would like to ask? If so, I will answer them, if I haven't made myself clear. If there are no questions, that it all. (Applause.)

The President: Gentlemen, I take a great deal of pleasure in introducing the next speaker on our afternoon program, whom I know from experience is interested in everything that you are interested in. He has been a booster for the fairs and a booster for everything for making Iowa a leader among states, and I take a great deal of pleasure in introducing to you the Governor-elect of Iowa, the Hon. Nate Kendall.

Mr. Chairman, Gentlemen of the Board of Agriculture of Iowa:

I want to introduce what I have to say by a brief indictment of this society. When the secretary invited me to appear here today, he furnished me the assurance that I should not be expected to say anything. He appreciated the fact, of course, that I am not accustomed to making a public appearance, and that when I am called upon to deliver a public address I am usually afflicted with impediment in speech, and I accepted his invitation upon that hypothesis. And now, when I come to this gathering this afternoon, I discover that I am expected, if the program may be relied upon, to occupy half of the afternoon. But don't be alarmed. I don't intend to do that. (Laughter.)

I have always been glad to boost for Iowa, and in my legislative career in the General Assembly of Iowa, I have had some satisfaction, I think, of boosting for the agricultural societies of Iowa. Of course, in the last year or two I have been boosting altogether in another quarter. (Laughter.) But now that that enterprise has been disposed of somewhat satisfactorily, I hope to return to my early allegiance, and I have great pleasure in assuring you gentlemen here this afternoon that in the little time I shall occupy the executive office of this state I intend to devote my utmost energies in promoting the interests you have at heart in this meeting this afternoon. (Applause.)

A little while ago I was asked to appear at the State Fair of Nebraska and submit a few scattering observations there upon agricultural achievement, and as I was leaving the grounds a gentleman said, "Mr. Kendall, do you have a state fair in Iowa?" (Laughter). I said, "We have 'the' state fair in Iowa." (Applause.)

I can remember when our state fair did not enjoy the prestige that it does now. I see men here in this audience this afternoon, here are one or two over here on my left, some down here in front who were present, I think, and adjusted the swaddling clothes about the agricultural society of Iowa—men who have maintained it in perfect fealty until now it has grown to be the greatest exhibition of its character in America. Not only a place of amusement and diversion and entertainment, although it is all that, it is much more—it has become one of the greatest educational institutions in our state. I think the people have large pride in the generous way in which they have supported the state fair. I know that there is now in the atmosphere everywhere clamorous demands for economy in the public service, and they are demands which must be recognized and answered, but I earnestly hope that there are two interests in our state which will never be subjected to parsimony by the legislature of Iowa—one is those great educational institutions of our commonwealth which provide enlightenment of our citizenship, and the other is the great agricultural society which furnishes us, or ought to furnish us, with the best information that can be derived upon agricultural subjects in our state, for agriculture is the basis of Iowa prosperity. Of course, you will be amazed if you will refer to statistics of our manufacturing, at its magnitude, at our mining and its magnitude; but, after all, they are mere drops in the bucket of our prosperity when compared to the great agricultural creations of our state.

What I have said of the state fair applies in a limited way to the county fairs of the state. I have in mind one county fair in Iowa that I think is almost ideal in its management. I will not indicate any county, so that it will leave every man to infer that I am discussing his county. But in that agricultural society they have, of course, the highest degree of emulation among the farmers as to the agricultural products; they have the highest spirit of rivalry, each endeavoring to excel the other in the merits of their products, and they have some fairly entertaining harness racing there, which I trust none of us is too old to enjoy; but in addition to that the fair in that county is a great visiting assembly where the people from remoter parts of the county meet there to revive old acquaintances, to renew old associations, to establish new friendships, and I believe it is one of the best and most agreeable, at the same time, methods of promoting a community interest in any county in the state of Iowa.

I think our legislature ought to be generous to the state fair, and it ought to contribute as liberally as may be consistent with proper prudence to the welfare and success of every county organization in Iowa.

I have done much more than merely appear here. I thank you for your attention. (Applause.)

The President: We will now listen to the report of the committee on credentials:

REPORT OF COMMITTEE ON CREDENTIALS.

We, your Committee on Credentials, report the following list of delegates entitled to vote at the State Agricultural Convention, December 8, 1920.

COUNTY AND DISTRICT FAIRS

Adair	F. A. Gatch, Greenfield
Adams	Harry Scott, Corning

Allamakee	J. T. McDermott, Waukon
Audubon	John Horning, Audubon
Benton	Logan B. Urice, Vinton
Black Hawk, Cedar Falls	J. L. Bailey, Cedar Falls
Black Hawk, Waterloo	E. S. Estel, Waterloo
Boone	J. C. Piper, Ogden
Bremer	B. B. Shores, Janesville
Buchanan, Aurora	C. H. Gould, Aurora
Buchanan, Independence	E. A. Giles, Independence
Buchanan, Jesup	W. J. Campbell, Jesup
Buena Vista	Roy H. Wilkinson, Alta
Butler	J. C. Carter, Allison
Calhoun, Manson	F. M. Griffin, Manson
Calhoun, Rockwell City	Andrew Stewart, Rockwell City
Carroll	Charles H. Parsons, Carroll
Cass, Atlantic	Carl E. Hoffman, Atlantic
Cass, Massena	Wray Wilson, Massena
Cedar	C. F. Simmermaker, Tipton
Cerro Gordo	A. N. Gruin, Mason City
Chickasaw	G. W. Smith, Nashua
Clay	L. W. Emery, Spencer
Clayton, Elkader	C. A. Benson, Elkader
Clayton, National	A. J. Kregel, Garnavillo
Clayton, Strawberry Point	Will Baldridge, Strawberry Point
Clinton	G. H. Christensen, DeWitt
Crawford	C. P. Harvey, Denison
Dallas	R. E. Zerwekh, Perry
Davis	Frank C. Young, Bloomfield
Decatur	C. M. Akes, Leon
Delaware	E. W. Williams, Manchester
Des Moines	Frank C. Norton, Burlington
Dickinson	J. E. Merrill, Mason City
Fayette	H. M. Stafford, West Union
Fremont	J. S. Athen, Hamburg
Greene	W. R. Adrian, Jefferson
Grundy	A. G. Briggs, Grundy Center
Guthrie	John Peckum, Guthrie Center
Hamilton	J. F. Webb, Webster City
Hancock	O. L. Senneff, Britt
Hardin	W. R. Scholfield, Eldora
Harrison	L. R. Pike, Missouri Valley
Henry, Mt. Pleasant	C. H. Tribby, Mt. Pleasant
Henry, Winfield	Russell Canby, Winfield
Humboldt	C. Skow, Humboldt
Ida	William Corrie, Ida Grove
Jackson	E. A. Phillips, Maquoketa
Jasper	E. J. Failor, Newton
Jefferson	L. H. Alexander, Fairfield
Jones, Anamosa	C. H. Ireland, Anamosa

Jones, Monticello	Fred J. Kay, Monticello
Keokuk	Harry Aldinger, What Cheer
Kossuth	S. D. Quarton, Algona
Lee, Donnellson	E. P. Amknacht, Donnellson
Lee, West Point	John Walljasper, West Point
Linn, Central City	William D. McTavish, Central City
Linn, Marion	Claude W. Lutz, Marion
Louisa	H. A. McMillan, Columbus Junction
Lucas	J. A. Newsome, Derby
Lyon	W. G. Smith, Rock Rapids
Mahaska	Roy E. Bowland, Oskaloosa
Marion	C. M. Gilson, Knoxville
Marshall	F. C. Davis, Albion
Marshall	C. E. Arney, Marshalltown
Mills	G. H. White, Malvern
Mitchell	A. S. Wright, Osage
Monona	N. W. McBeath, Whiting
Monroe	F. A. Wilkinson, Albia
Muscatine	W. H. Shipman, West Liberty
O'Brien	Harold E. Benson, Sheldon
Page, Clarinda	J. C. Beckner, Clarinda
Page, Shenandoah	E. R. Woodford, Shenandoah
Pocahontas	H. A. Blizzard, Fonda
Pottawattamie	W. W. Weise, Avoca
Poweshiek, Brooklyn	R. O. Heatwole, Brooklyn
Poweshiek, Grinnell	Ralph Sherman, Grinnell
Poweshiek, Malcom	William McClure, Malcom
Ringgold	I. J. Dalbey, Mount Ayr
Sac	W. F. Weary, Sac City
Scott	M. H. Calderwood, Davenport
Shelby	W. E. Cooper, Harlan
Sioux	George Dunlop, Orange City
Story	Robert J. Shanahan, Ames
Tama	A. G. Smith, Toledo
Taylor	John G. Thompson, Bedford
Van Buren	J. E. Powell, Milton
Warren	C. H. Fisher, Indianola
Wayne	F. B. Selby, Corydon
Webster	H. S. Stanbery, Fort Dodge
Winnebago	R. E. Hanson, Forest City
Winneshiek	Henry Davidson, Decorah
Woodbury	Don V. Moore, Sioux City
Worth	C. H. Develle
Wright	J. H. Moore, Clarion

FARMERS INSTITUTES.

Black Hawk	W. D. Strayer
Buena Vista	W. C. Skiff
Delaware	J. C. Nieman, Manchester

Hamilton	H. Rutledge
Hardin	W. A. Humke, Ackley
Jasper	J. E. Craven, Kellogg
Keokuk	W. E. Utterback, Sigourney
Polk	H. N. Webster, Runnels
Polk	James H. Deemer, Des Moines
Ringgold	J. F. Wall, Diagonal
Warren	J. F. Henry, Indianola
Warren	J. A. Mason, Carlisle

SHORT COURSE.

Polk	A. L. Bishop, Des Moines

COUNTIES IN WHICH NO FAIRS ARE HELD.

Appanoose	J. M. Wilson
Cherokee	J. W. Dailey
Clarke	C. T. Ayres, Osceola
Emmet	B. A. Gronsted
Iowa	H. H. Reed
Johnson	Samuel A. Hunter, Iowa City
Madison	T. J. Hudson, Winterset
Montgomery	Col. L. D. Ross, Red Oak
Palo Alto	F. C. Davidson
Plymouth	Leonard M. Hentges
Polk	J. A. Backman, Des Moines
Union	Joshua Routh, Union
Washington	R. L. Livingston

ASSOCIATIONS ENTITLED TO REPRESENTATION.

State Horticultural Society	Earl Ferris
Iowa State Dairy Association	W. A. Wentworth

STATE BOARD OF AGRICULTURE.

Ex-Officio Members

N. E. Kendall, Governor of State, Des Moines
R. A. Pearson, President Iowa State College, Ames
W. B. Barney, State Dairy Commissioner, Des Moines
Peter Malcolm, State Veterinarian, Des Moines

OFFICERS.

President	C. E. Cameron, Alta
Vice-President	J. P. Mullen, Fonda
Secretary	A. R. Corey, Des Moines
Treasurer	W. W. Morrow, Afton

DISTRICT MEMBERS.

First District	H. O. Weaver, Wapello
Second District	E. T. Davis, Iowa City
Third District	E. M. Reeves, Waverly
Fourth District	E. J. Curtin, Decorah
Fifth District	C. A. Tow, Norway
Sixth District	T. C. Legoe What Cheer
Seventh District	C. F. Curtiss, Ames
Eighth District	F. E. Sheldon, Mount Ayr
Ninth District	Chas. Escher, Jr., Botna
Tenth District	Sears McHenry, Denison
Eleventh District	H. L. Pike, Whiting

H. L. PIKE,
W. R. SCHOLFIELD,
F. M. GRIFFIN,
Committee on Credentials.

The President: We will now have the report of the committee on resolutions.

To the Members of the State Agricultural Convention:

Your Committee on Resolutions begs leave to submit the following:

1. We desire to congratulate the management, the officers and the directors of the Iowa State Fair on their success, and we hereby extend to the said officers and directors of the Iowa State Fair our sincere appreciation and thanks for the loyal and efficient services rendered the people of the great State of Iowa, and tender to them our hearty cooperation in the management of future fairs. In view of the fact of the sentiment expressed that the coming year will be the crucial test for all fairs, owing to the uncertain values of agricultural products, we pledge to the State Fair Board our unqualified support and cooperation in that the 1921 fair may keep pace with the fairs of the past.

2. We especially desire to commend the efficient and worthy services of our secretary, Arthur R. Corey, and his very efficient assistants for their painstaking and earnest efforts in the up-building of the state fair, and for the courteous consideration shown to the various county and district organizations throughout the state.

3 That inasmuch as the Iowa State Fair, and the district and county fairs of the state are the most important educational institutions of our state, we earnestly request the officers of the Iowa State Fair to take immediate steps to present to the Commissioner of Internal Revenue to settle the disputes which have arisen in regard to the payment of the grandstand tax to the government. We further recommend that the State Fair Board take this important matter up with our senators and representatives in congress; also with the Secretary of Agriculture, asking their cooperation and calling this very vital matter to the attention of the Commissioner of Internal Revenue.

4. Inasmuch as the basic wealth of Iowa is founded upon the resources and development of her agricultural progression, we earnestly request the legislative committee to present to the next General Assembly the needs for the completion and the repair of the improvements at the state fair grounds, and ask an appropriation sufficient to meet the present necessities. We further recommend that the said legislative committee cooperate with a like committee of the Iowa Fair Managers Association in looking forward to increased appropriations for county and district fairs.

H. O. WEAVER,
ROSS J. SHANAHAN,
G. H. WHITE,
Committee on Resolutions.

The President: The next order of business will be the election of the officers and members of the State Board of Agriculture.

The Vice President: The first office to be filled is that of president. Gentlemen, what is your pleasure?

F. W. Weary, Sac County: I wish to place in nomination Mr. C. E. Cameron, Buena Vista County, to succeed himself as president of the State Board of Agriculture.

Mr. George White of Mills County seconded the nomination. There being no other nominations, Mr. Weary moved that the rules be suspended and that the secretary be instructed to cast the vote of all delegates present for Mr. C. E. Cameron. Motion was seconded and carried, and the secretary announced that he so cast the 134 votes of the delegates present for Mr. Cameron. The vice president declared Mr. Cameron duly elected president of the State Board of Agriculture for the ensuing year.

Mr. Cameron assumed the chair and made the following remarks: "Gentlemen of the Convention: I certainly consider this a high honor, and I know your time is limited as a great many of you desire to take an early train for home, and I will therefore make no formal address."

The President: The next will be the election of a vice president for the ensuing year.

S. D. Quarton, Kossuth County: I desire to place in nomination for vice president Mr. J. P. Mullen of Pocahontas County to succeed himself in this position.

The motion was duly seconded by E. J. Curtin of Winneshiek County. There being no other nominations, Mr. Quarton moved that the rules be suspended and that the secretary be instructed to cast the vote of the convention for Mr. Mullen to succeed himself as vice president. The motion was seconded and the secretary thereupon cast the 134 votes of the convention for Mr. Mullen, and the chairman declared Mr. Mullen duly elected vice president of the State Board of Agriculture for the ensuing year.

J. P. Mullen: Gentlemen, I assure you I am very thankful to you for your continued confidence in my work, and I pledge you my best efforts in the future for the Iowa State Fair and the activities of the State Board of Agriculture.

The President: The next order of business will be the election of directors from the even-numbered districts. Nominations for director from the second district are now in order.

E. A. Phillips, Jackson County: Gentlemen, I wish to place in nomination Mr. E. T. Davis, the present incumbent.

Motion was seconded by F. M. Griffin of Calhoun County. There being no other nominations, Mr. Phillips moved that the nominations be closed, the rules suspended, and the secretary instructed to cast the entire vote of the convention for Mr. Davis. The motion was duly seconded, and the sercetary thereupon cast the 134 votes of the convention for Mr. E. T. Davis of Johnson County to succeed himself as a member of the State Board of Agriculture from the second district. The president thereupon declared Mr. Davis duly elected.

The President: We will now receive nominations for director to represent the fourth district.

George White, Mills County: I wish to place in nomination Mr. E. J. Curtin of Winneshiek County.

Motion was seconded by Mr. Griffin of Calhoun County. There being no further nominations, Mr. White moved that the rules be suspended and the secretary instructed to cast the vote of the convention for Mr. Curtin. Motion was duly seconded. The secretary then cast the 134 votes of the convention for Mr. Curtin, and the president declared Mr. Curtin duly elected director of the State Board of Agriculture from the fourth district.

The President: Nominations for director from the sixth district are now in order.

V. G. Warner, Davis County: I wish to place in nomination Mr. T. C. Legoe of Keokuk County.

Ralph Sherman, Poweshiek County: I nominate Mr. I. S. Bailey of Poweshiek County.

The President: If there are no further nominations, we will proceed with the balloting. I will appoint as tellers Don V. Moore of Woodbury County, E. A. Phillips of Jackson County and J. C. Beckner of Page County. The secretary will call the roll.

The result of the vote was as follows:

T. C. Legoe	103
I. S. Bailey	30
Andrew Stewart	1

I. S. Bailey, Poweshiek County: Mr. President, I move you that the election of Mr. Legoe be made unanimous.

Motion was duly seconded and adopted.

Mr. President: I declare Mr. T. C. Legoe of Keokuk County to be duly elected as director of the State Board of Agriculture from the sixth district.

The President: The next will be the election of a director from the eighth district.

J. C. Beckner, Page County: I wish to place in nomination Mr. G. E. Clayton of Page County for office of director of the State Board of Agriculture from the eighth district.

I. J. Dalbey, Ringgold County: I wish to place in nomination the present incumbent, Mr. F. E. Sheldon of Ringgold County, to succeed himself as director of the State Board of Agriculture from the eighth district.

Mr. President: If there are no further nominations, we will proceed to ballot. The secretary will call the roll.

The result of the vote was as follows:

G. E. Clayton, Page County	44
F. E. Sheldon, Ringgold County	88

The President: Mr. Sheldon having a majority of all votes cast, I therefore declare him duly elected as director of the State Board of Agriculture from the eighth district.

The next is the election of a director from the tenth district.

W. E. Skiff, Buena Vista County: I wish to place in nomination Mr. Sears McHenry of Crawford County.

H. S. Stanbery, Webster County: I move that the nominations be closed, the rules suspended and the secretary be instructed to cast the entire vote of this convention for Mr. McHenry to succeed himself as director from the tenth district.

Motion seconded by Mr. Pike of Harrison County. The secretary then cast the 134 votes of the convention for Mr. McHenry, and the president declared Mr. McHenry duly elected to succeed himself as director of the State Board of Agriculture from the tenth district.

The President: Is there anything further under the head of unfinished business, or new business, to be brought before the convention at this time?

Don V. Moore, Woodbury County: I move that we adjourn.

Motion seconded and adopted.

PART III

Thirteenth Annual Convention of the Iowa Fair Managers Association

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HELD AT THE HOTEL SAVERY, DES MOINES, IOWA, DECEMBER 7, 1920.

The President (H. S. Stanbery): Gentlemen, we will come to order.

The next in order is the appointment of committees on credentials and resolutions. What is your pleasure, gentlemen?

Motion by Harvey, seconded by Beckner, and unanimously adopted, that the chairman be authorized to appoint a committee of three.

The President: I am going to appoint on the Credentials committee Don Moore of Sioux City as chairman, and ask him to choose two other men to act with him.

What is your pleasure on the Resolutions committee?

Motion by Williams, seconded by Weary, and unanimously adopted, that the chairman be authorized to appoint a committee of three.

The President: I will appoint on that committee Mr. E. W. Williams of Manchester as chairman, and ask him to select two other gentlemen to work with him.

On account of the report of the treasurer not being ready at this time, we are going to deviate a little bit from the program and pass up the treasurer's report. We will next hear, then, the synopsis of the report of the secretary for the past year.

Meeting held at the New Savery Hotel, Des Moines. Mr. H. S. Stanbery presided at the meeting.

First procedure was the appointing of a Credentials Committee, Chairman Stanbery appointing the following committee: Mr. Carl E. Hoffman; Mr. W. R. Scholfield and Mr. J. S. Bailey.

The next procedure was the appointing of a Resolutions Committee. Chairman Stanbery appointed the following committee: Mr. Roy Wilkinson, Mr. J. C. Beckner and Mr. E. S. Estell.

The treasurer's report was read by Mr. F. A. Gatch and approved and accepted as read.

The secretary's report was given by Mr. J. Q. Lauer and approved and accepted.

Payment of dues, distribution of badges, general discussions and round-table talks took up the balance of the morning. The round-table talks covered the following subjects: Carnivals at fairs, Shall we arrange a Headquarters Booth at the State Fair? What did you consider your best drawing card at your 1919 fair? Should concessionaires secure licenses? State aid, County aid, Harness Horse Association, Mutual insurance.

Report of Credentials Committee. The first paper on the program, entitled "Uniform Classification for Culinary Department," read by Mrs. Louise H. Campbell of Ames, Iowa. This was an interesting subject and valuable information for all fairs.

Next address, "The Race Horse and the County Fair," by Mr. Fred Terry, editor of The Horseman, Indianapolis, Ind. This was a discussion worth while and of interest to all fair managers.

W. H. Smollinger, secretary of the American Trotting Association of Chicago, Ill., was next called on for some remarks. His remarks were very interesting and they are worth re-reading in last year's report.

Next on the program was a discussion, "Building Up a Fair by Cooperation," by Logan B. Urice, secretary Benton County Fair, Vinton, Iowa.

Next was a paper entitled, "Free Space a Relic of the Past," by J. R. Mullen, vice-president of the Iowa State Fair, Fonda, Iowa, a very interesting subject.

President Stanbery next called on J. Alex Sloan, "The Father of the Automobile Racing Game," for a few remarks. His remarks were well received by the members present.

A few remarks by John C. Simpson, Secretary Eastern States Exposition, Springfield, Mass. Said remarks contained valuable information for fair managers.

At this time a general discussion of various subjects was entered into by members present.

The election of officers was next in order with the following results: President, H. S. Stanbery, Fort Dodge; vice-president, Andrew Stewart, Rockwell City; treasurer, F. A. Gatch, Greenfield; secretary, M. E. Bacon, Davenport; district managers, S. W. Emery, Charles H. Barber, E. W. Williams, E. S. Estel, W. R. Scholfield, C. G. Kaskey, Roy Wilkinson, Carl E. Hoffman, Roy E. Rowland, Logan B. Urice, W. H. Shipman, C. H. Tribby, Frank C. Young and G. H. White. Entertainment committee, W. R. Scholfield, Carl E. Hoffman, Roy Wilkinson, F. A. Gatch and M. E. Bacon.

Next was a discussion of membership dues. Moved by J. I. Overholt of Spirit Lake: Being the smallest fair in the association, I make the motion that $10.00 be the minimum fee.

E. W. Williams seconded the motion. Moved, seconded and unanimously adopted that $10.00 be hereafter the minimum fee for membership in the association.

At 6:30 p. m. all members and guests present were invited to the twelfth annual banquet. H. S. Stanbery was toastmaster.

Report of the Resolutions Committee. Governor W. S. Harding spoke in the absence of Mayor Tom Fairweather of Des Moines. Mr. J. R. Files of Fort Dodge was the principal speaker of the evening, a speech well worth spending time to read. It is printed in our annual report. Mr. A. S. Rule of Mason City was called upon, also Senator P. C. Holdoegel of Rockwell City.

Impromptu talks were made by E. J. Curtin of Decorah and George White of Malvern, Iowa, on the feature of added money for racing. Music was furnished by T. Fred Henry, his orchestra, soloists and cabaret singers. Star vaudeville acts from the Orpheum Theater and circuit were on the program. It was the consensus of opinion that the show offered was the best ever presented at an annual banquet. The entertainment committee used rare judgment in their selection of talent offered.

M. E. BACON,
Scretary Iowa Fair Managers' Association.

The President: Gentlemen, you have heard the report of the secretary,—what will we do with the same?

Motion by Harvey, seconded by White, and unanimously carried, that the report as read be adopted.

The President: The next topic is "The Future of Harness Horse Racing."

E. J. Curtin, Decorah, Iowa.

Mr. President and Friends:

I will have to apologize for the way I came up here. I have been lame since last summer and I don't get around very well, but I do the best I can. That is all any of us can do.

I am more than glad to be with you here today, as nothing pleases me more than to attend a gathering of Iowa fair managers. I see in this meeting friends of many years standing, men who enjoy the fair work and keep at it year after year when they know in their hearts that it is a losing game for them financially, and they had far better be engaged in something more lucrative Still, the same faces are here year after year, each trying to get new ideas from his comrades, trying to make his next year's fair better than his last. There is a certain fascination in the fair game that keeps men interested once they get into it. It is the uncertainty of everything connected with it. You can plan and plan and have every detail perfected, and then on the morning of the big days of the fair a little black cloud comes out of the east and before the morning is half over the fair grounds is a duck pond and the plans of a year are knocked out. Visions of a profit large enough to pay for the new building you had just erected, vanish. It's a cold, cruel world, and a promissory note at the local bank has to take the place of the profits that "might have been." Still, it's things of this kind that keep you in the game. You know the note has to be paid, so you go to it again, and if it isn't all sunshine, neither is it all rain. In the long run the law of averages works and the note will be paid somehow. Even if you have said, as we all have many times, "This is my last year," you know in your own heart that you want just one more year to pick off the plums that you so nearly got this time.

As a rule the entertainment end of the fair is one that gives the fair manager the most trouble. You must have all the different kinds of amusement to entertain your patrons in order that you can get them interested in the educational part of the fair. This, in the final analysis, is the worth while part, but we are a strange people and experience teaches us that we want our educational features "sugar coated" with amusement features, so it is up to the fair manager to provide them. We must have all kinds of entertainment for our patrons and the manager that attempts to confine himself to any one particular kind, to the exclusion of others, will soon find himself falling behind the procession.

As I look out over this meeting and see so many practical, experienced fair men present, I am sure that most of you will agree with me that, while you favor all kinds of amusement features, deep down in your hearts you consider the harness racing the backbone of your entertainment program, and that if you had to give up any entertainment feature this would be the last to go. Am I right? I think so. And starting from this basis, will assume you want harness racing continued.

Up to seven or eight years ago, before the day of the automobile, there were light harness stallions standing for service almost everywhere. Most of these were standard-bred horses, and when the colt was old enough he was trained a little, and if he showed promise was kept for racing purposes. If not, he was sold for road use. In this way there was plenty of material to work on and plenty of horses to fill our races. But after the coming of the automobile, the horse slowly but surely was driven off the road. The doctor sold his old mare that used to raise him a fine colt after her road days were over, and bought an auto. The liveryman bought a few Fords and auctioned off his horses. And so it went all over the country, until now a driving horse is a rarity. There are only a few farms in America where horses are bred for racing purposes only. In the days when standard-bred stallions were common, there were probably fifty times as many colts of this kind bred than at present, and, as our harness races depend on standard-bred horses, it is easy to see why horses are so scarce and why our races are so hard to fill.

In the county in which I live, there were at least twenty standard-bred stallions standing for service eight years ago. Now there is not one in our county. It is the same all over Iowa. Another reason for the scarcity of horses is that the great majority of our fairs come inside of four weeks —the last two weeks of August and the first two weeks of September. On some of these weeks there are as many as twenty fairs operating in Iowa alone. Allowing 30 horses as the smallest number to insure good racing at a meeting, and multiplying it by 20, the fairs would require 600 race horses to supply that week for Iowa alone. I doubt if there are 300 race horses owned in Iowa, and they are growing less every year.

Another thing—until the last year or two we did not pay anywhere near enough in purses to enable the horse owners to pay expenses. That drove a lot of them out of the business. We always paid a fixed amount for music, baseball, vaudeville, etc., but when it came to the races, offered purses and charged 5% of the purse offered for each horse to enter, and then deducted 5% from each of the first four horses, so that the race never cost us more than half of what we advertised, and sometimes not even that. I recall one race at our state fair a few years ago where a purse of $3,000 was advertised. After it was over, it turned out that the state fair had paid only $90 of this, while the horsemen paid in entrances and deductions $2,910. No wonder they are quitting.

The last year or two, of course, we have been offering our purses on the "added money" plan. This, while it is a lot better, is not yet sufficiently high to keep the horseman even with the game. As a sample—at the county fair this year of which I am secretary, we had seven races and added $250 to each race. It cost us $1,750 for the seven races. We had 30 horses there, and if the $1,750 had been divided equally between them, each horse would have received $58.33. Now, how far do you think that would go in these days of high prices? Each horse has a driver and a groom, and the owner is generally along. Then the horse has to be shipped and fed each week, and the two or three men that are along have to eat and pay railroad fare and draw some salary, so that $58.33 would not more than half pay the bills. Take a vaudeville act with two people in it, and you have to pay about $250 for it. That is $125 each. While the race horse with two or three people along and high freight charges and expenses to pay, does not get half as much as one vaudeville performer.

This is another reason why horses are scarce. I am free to say that I am fearful for the future of harness racing at fairs. Of course, if we pay enough we can get the horses. Money will attract, but it looks to me that unless we add from $500 to $1,000 for each race, it will be hard to attract very many horses. If there were a few locally owned horses, they might race for less, but usually they do not attract the crowd, as the crowd wants to see outside horses.

Think this over when you go home. Then take out your books and figure out how much you have paid out for racing, how many horses you had at the meeting, and you will be surprised at the small amount each horse averaged. It does not change things to find that some one horse won several hundred dollars. It is the average that counts, and the ones that won little or nothing are just as expensive to race as the winners. The only difference is that the owners run out of money quicker and have to ship home, thus causing a still greater shortage of horses as the season progresses.

I don't like to be pessimistic on anything, but for the life of me I cannot see how we are going to continue to have harness races without paying a lot more money than at present. And if this is done and the shortage continues, the larger fairs that can afford to pay the most, will get the

horses, while the smaller fairs will have to find something else to take their places.

Gentlemen, I thank you! (Applause.)

The President: Gentlemen, if there are any questions you want to ask Mr. Curtin, I presume he will be glad to answer them

Andrew Steward: We had 26 entries in the 2:25 pace, with a purse of $250. How much would they get?

Mr. Curtin: About $9.50 each.

Member: How are you going to do away with a fixed race, which has become so common as to make the public dissatisfied?

Mr. Curtin: Well, sir, that is something that in my experience is not common. That results from these special races, mostly, that they fail to fill. You have specials, and they say they are not getting very much money for them, and they fix them and race that way. I am very much averse to these specials, and if the races don't fill I don't give them.

Mr. Hanson: We had six or eight races at our fair, with six of them filled, and out of those six races five of them were fixed, and the other one would have been fixed if they could have got together. They were all fixed up before they started. Those things are what do more harm for horse racing than anything else.

Mr. Shipman: Put some good judges in the stand.

Member: I would like to ask the gentleman if you have an honest superintendent of speed.

Mr. Hanson: I think so, yes.

Mr. Curtin: Why does he permit such a thing?

Mr. Hanson: I don't know.

Mr. Curtin: What is the object of fixing it? Why do they want to do that? Why do they want to fix anything? There is nothing to gain by it.

Mr. Hanson: We know they all do it.

Mr. Curtin: It is my experience that with the fellows who have capable superintendents that there is no fixing. Mr. Shipman, you don't have fixed races, do you?

Mr. Shipman: No sir.

Mr. Young: We had two attempts at that, and we took the drivers off, and we didn't have any more of that.

Mr. Curtin: I don't see why there should be any attempt to fix races. Isn't that a kind of relic of the past, thinking that every horse race is crooked or gambled, because some 25 or 30 years ago they were? That's the way it looks to me, and I don't see any fixing of races these days.

Mr. Hanson: I think where your races are filled good, you don't get that, but where your races are just barely filled, they do it.

Mr. Curtin: Why do they want to fix them?

Mr. Young: I think the solution of that, a good deal, is this: Since they have appointed the official timer this thing of setting a watch back or up a little in the time is not so promiscuously done as it was a few years ago, and we had one or two cases where the men didn't want to mark their horses, and they would rather take second place than give them a mark, and that was the cause of our trouble, absolutely nothing else. They had more speed than the other horses, and we knew it, and the result of it was that it was a kind of hard thing to do. I don't know that I would have done it, because I have a lot of sympathy for these horsemen. A lot of them are a little aggravating sometimes, but I find they are a pretty nice set of fellows if you treat them right. You have to favor a fellow a little once in a while. I can't help doing it myself, and that was the cause and the only cause we had. We had the best racing we ever had on our fair ground, and we had more horses, and I think every man went away feeling that he was treated absolutely right, but as I said we had a little kick in one place, and it didn't get them any place, but we took on another driver, but he was gentleman enough so that he drove the horse like the other fellow did. (Laughter). But we satisfied the kick. We had a good race, but some fellow got it up his snoot that this fellow wasn't doing as he ought to do and we put on another driver and he drove just what the other fellow did, and he got out of him all that he could.

Mr. Austin: We had a little experience this year. For once we were short of horses. I went to the boys and said "There is a piece of money in it for everybody that will race." After the free-for-all race, there were only two starters, and I went to the boys and said "Will you give us a race?" and they said "Yes, we'll give you a good, honest race," and they sped around in ten and a quarter. That was going some, wasn't it?

Mr. Curtin: I guess it was!

Mr. Austin: In our 2:17 pace I said "The money's up, boys; go after it" and they stepped it and made a race out of it, and they played square. Your man was one of the men that done it, but we don't have very many, and some of the folks came to me and complained because we didn't have more horses, and I said "After they get away from the rail in the first place, how many of the horses are you watching? It's a battle between two, or once in a while three, but you don't watch more than two at the finish of the race. It is usually a contest between two horses." When I had time I sat down and took the Iowa papers of horse races and looked them over and figured them up, and there was only about 50 per cent of the horses out racing at the time of our fair as there was four weeks ahead of us. The reason was that the fellow that had a horse that wasn't doing good shipped him home. And the thing to consider is if you don't get more money, I'll tell you, you will get left on horses. There aren't but few fairs in Iowa that can't afford to pay four or five hundred dollars in added money, and that is what you have to do to get the races.

Mr. Duelly: Up along the state line where I live it is a little hard for us to keep in touch with the Iowa fairs. Mason City is our nearest city and it is so much bigger than we are that we cannot hook up with them at all, so that we have to go along wherever we can, and the best co-operation is across the state line in Minnesota, and even then it is sometimes hard, because the Minnesota fairs don't run the same. In 1919 we tried to put on some horses, and just before the fair we had a big rain, and the horsemen didn't want to bring their horses across country on account of the mud, and because we had been advertising horse racing we did everything we could to get horses to come, and succeeded to a certain extent. But when we came to the secretary's office at the end of the races to settle up, we found that they were splitting the money absolutely irrespective of winnings among themselves. We then learned that they had agreed among themselves before coming down there that they would come down and each fellow put in a sort of jack-pot his winnings and draw out so much money, no matter who won. That got noised about and it hurt racing in our fair to such an extent that we didn't have any races at all in 1920. In a way I think that answers Mr. Curtin's question why they would do it. They were not willing to drive across country with their horses when they weren't sure of getting something for their trouble. I can't say that I blame them much, because the roads were muddy and it was an unpleasant trip, and I think it answers his question why they did it—they got together over long distance and fixed it up so that each fellow would get something out of it no matter whether he won first or fourth place. But it hurt our fair, so that we this year didn't offer horse racing at all. I will say in their behalf, however, that I realize that our purses are not large enough. We have a small fair in a small county, and that is a large share of the blame. If we could afford to furnish large enough purses, they would go after them hot and heavy and give real races, but the smaller fairs that have to restrict themselves to small purses will bump up against that situation.

Mr. Curtin: I can understand a case of that kind, where that is the situation.

Mr. Duelly: We are not blaming the horsemen, as we realize our fair is too small to have good races.

Mr. George White: Speaking about fixing races and pulling horse stuff. We had a little instance happen down at Malvern a few years ago that started out to be as thrilling a race as we ever had. It was a 2:20 pace, giving $250 in added money, and the first heat was won in 11¼, the second heat was won in 12½, and the next heat in 11¼, and the next horse came in and run it in 13¼. The first fellow that won the heat came up to me and said "My animal is a four-year-old colt, and while I stand for money, I would like to withdraw it." Not thinking what was going on, I gave him permission. And then another fellow came to me and wanted to draw his horse, and I said "Well, I'll see the judge about it." This fellow came to me and said "This man has drawed his horse, and these other people don't want to win, but if you let me stay in the :22 class I'll go in and win it," and I said "That's an awful drop. The judges are running it, and I'll see what they say." So I went over and I asked the judge about it, and I said "What do you think about anything of that kind?" And he said "You know what I think about it without asking me. You better go and tell those fellows to put on a race." So I returned to them and said "You fellows go in there and win this race, if you know what's good for you." And this fellow came back and won the race in 21¼, and the judges fined those drivers $50. And he won the next heat in 19¼. They took them both down, and the next horse won in 13¼. Well, of course, that left the two heat winners with two heats apiece to come back and finish up. One fellow that had a fast mark up to that date gets to the driver of the other horse and says "I'll give you a hundred if you will not win this heat," and the next mile was in 31¼, with the last quarter in about thirty seconds. (Laughter.) So that the man that was to get the hundred went away without the hundred and the other fellow left that night without his purse.

Mr. Curtin: There is one of the cases! That is something that sometimes happens—they don't try.

Mr. White: The association did all they could to stop it, too.

Mr. Curtin: Those things work an injury, there's no question about that. They are exceptional cases. I have never had a case of that kind yet. Once in a while somebody will get time suppressed or reduced, or something like that. We absolutely give every horse what he gets, and the result is we have had good racing, but it is getting less each year as the profits of racing are getting less, and they are almost always now a loss, and I am fearful it is dying out.

Mr. White: The state fairs and the larger county and district fairs can afford to give large enough purses to attract the better horses, but the county fair is paying just about all they can for racing, and they have got to pay for their entertainment. If the point system were used I think it would do away with a lot of that kind of racing.

Mr. Young: I don't want to consume too much time, but there is one thing under this head that I want to suggest, and that is the custom that is being practiced by a lot of secretaries of the various fairs going out over the country offering to pay railroad fares, or offering to give entrance money, to the horsemen if they will leave a certain fair and come to their fair. I think that is a practice that should be sat on. Make your purses big enough so that it will be a good enough entertainment to attract people, and if the other fellow can beat you to it, take off your hat to him; but if we start a custom of that kind in Iowa and bid against each other, it will hurt our fairs. I had a man come to Oskaloosa with six horses. This fellow came down and said: "I was offered my entrance money free if I would go to the other fair," but I happened to have his entrance money or I suppose he would have gone. Their purses were just as big as ours, but I think if we indulge in things of that kind there is no knowing where it will stop, and I think it is the worst practice that the secretaries of the fairs of Iowa could ever undertake or ever engage in. I would like to see these men here today take some action on that. I should like to see an agreement or a resolution, or something, and I don't care if you make it a good stiff fine for the man that does it. I think something of that kind ought to be done. This thing of starting out and going from one fair to another and fighting against them is going to demoralize us, and I would like to see some action taken to correct that practice.

Mr. Bacon: If you will refer to the resolution passed at Fort Dodge last spring, you will find that it covers that point. It provided that there would be no inducement made to breeders of livestock or horsemen to come.

Mr. Young: But it has been done this year just the same.

Mr. Barber: Two of the fellows at that meeting went right out and did it.

Mr. Bacon: There is something that ought to come to the attention of the fair secretaries, and the first is that last year in the East there was a new trotting association formed called the Union Trotting association. At that time they named on their board of directors Mr. E. D. Curtin as a director, and he was at that time president of the Harness Horse association. It was confused in the minds of many secretaries throughout the state as being a part of the Harness Horse association, and they joined, and they also took over some of the rules of the Harness Horse association. Any of you secretaries attending the meeting of the American Trotting association last February you will remember that when the rules committee met and the rules were adopted, the Harness Horse association had a committee there, and they recommended certain rules to be adopted by the American Trotting association, and at that time they elected from the west the greatest breeder of harness horses in the world today, Mr. E. D. Gould. They also have on the board of the American Trotting association the president of your Iowa State Fair, Mr. C. E. Cameron, and I am going to ask you to listen to a letter I received from Mr. Smollinger who is secretary of the American Trotting association:

Mr. M. E. Bacon, Secretary,
Davenport, Iowa.

Dear Sir:

I am in receipt of yours of the 30th and I regret that it will be impossible for me to be at your meeting as it is quite essential that I should be at the meeting of the Board of Appeals on December 7th, and that date can not be changed as it is fixed by the by-laws.

I appreciate very much your interest in securing the return of the few associations which during 1920 followed off strange gods. The Association which they joined is entirely incapable of giving service of any kind to its members, as it has no records and no officials that know anything or are capable of determining the eligibility of horses, or anything of that kind.

There have been several conferences between myself and the officials of the Union Trotting Association at their request on the matter of amalgamation with The American Trotting Association. So far they have had nothing to offer which seemed to me to be of interest to The American Trotting Association or helpful to the game.

I wish to assure you of my sincere appreciation of your efforts in the past and to thank you in advance for the good things that you will do for us during the meeting of the fairs.

With best wishes, I am

Very truly yours,
(Signed) W. H. Smollinger,
Secretary.

I might state that at Chicago there is a meeting of the board of appeals of the American Trotting association today and there will be a joint meeting of the American Trotting association and the directors of the Union Trotting association in which they want to join the American Trotting association and be absorbed by the American Trotting association. It is up to the board of directors of the American whether or not they take them in. Some of the men that have been so active in the Harness Horse association as well as in the American were named directors of the Union Trotting association. They named Mr. Curtin who is a director, but I don't think he was active, at all.

Mr. Curtin: They put me in without my knowledge and over my protest. They announced it in the papers a couple of months before I had any official knowldege from them. About two months after I was advised by the newspapers that I had been elected a director, I was notified, and I immediately wrote them that the Harness Horse association was not going to be tied up with the Union Trotting association, and that was all that was said. I haven't had any official communication that I have been dropped, as I told them to do.

Don Moore: I am just a new-comer to Iowa, but as my ancestors who came over in the Mayflower left the old country because they couldn't talk enough over there, I am going to start out early and make myself heard. I want to ask Mr. Curtin, would it help our game any by circuits offering more early closing events to get around marking these horses? I have found in my experience that the horse will start out early, and by the time he comes to the fifth or sixth fair, and sometimes the fourth fair, he is considered out of his class, and doesn't care to enter him the class races during the later fairs. Will it help any if all of us offered more early closing of slow events? I don't know exactly what I mean by "slow events," but I mean under :22 and :25, so as to keep these horses in their class and allow them to race at the later fairs. I know that Sioux City lost a large number of horses this year that got out of their class before the season was far advanced. They started out at

:22 or :25 and would like to have stayed in there longer, and at some of the fairs he had to get down to :16 or :17 to win, and then when he got to Sioux City he couldn't stand the pace and kept out. We are going to try to offer two or three more early closing events at Sioux City this year in order to keep some of the horses good until the meeting at Sioux City. Will it help us if we do make more early closing events, whether the purses are large or small? What do you think about it?

Mr. Curtin: That is another problem, sometimes it does and sometimes it does not. The objection to that is this: They are all equal in May or April when they commence, but as soon as the horses get out and commence to race, one or two horses absolutely dominate those classes. There will be 25 entries in the spring, and everybody thinks his horse is a winner, but after a couple or three weeks of racing one stands out very prominently and another is second best, and that means that the other 23 horses will not make much of a showing, and their owners will not go on thru with them. So that you might have one or two horses in each of those stakes.

At Albert Lea, Minnesota, Dr. Higley, is secretary of their county fair, and he addresses six early closing stakes to take place the last week in August. He had six, and as I remember he had 82 entries—something like that. I guess he had a hundred entries in the six classes. And when it came time, as time went on, and these outstanding horses developed in those races, I think there were only 21 horses came to that meeting out of the original 100 entered, but, unfortunately, they had a hard rain and the events had to be called off.

Mr. Moore: Then your idea is to give more money, so far as the fair officials are concerned, and then take chances?

Mr. Curtin: Yes sir. My idea is this, but it would require a change in the rules. Three or four years ago the great trouble was the fear of a record. If you could pass a law in the trotting association not to make a record a bar until the week after the Fourth of July, when the fairs begin, and let them race without taking a record—take the record but don't make it a bar, it would help a whole lot. That was the rule for a year, but when the National and American made the same rules that was knocked out by the people in the National Trotting association in the east, where they don't have any early races. Under the present rules a horse obtains his record and you cannot change it. In my opinion, if a horse could race without fear of a record up to a certain time, there would be no pulling, and then, say, the second week in July, or whenever you fix it, when the purses are getting larger and when they can afford to take records, then let them race the race of the year on their merits. A lot of horses race in their class just ten days or a week before the meeting, and then because of their speed they are out of it, while the other way you would get a real contest.

Mr. Moore: That just fixes it right there. How many people in this room are members of the American Trotting association? How many are represented at Chicago today? There is one. That answers the question right there.

Mr. Curtin: How many were there last February? * * * Four.

Mr. Moore: As long as you fair men kick about the horse race game and don't take the trouble to be represented in the American Trotting association, but send your proxies, you have no right to kick about the rules.

Mr. Curtin: Many of the men gave their proxies to Mr. Cameron. I had five or six proxies myself.

Mr. Moore: That's the trouble. Let's all go to the meeting next February.

Mr. Stanbery: If you cannot go, send your proxies to Mr. Curtin or Mr. Cameron.

The President: Since our time is very limited, we will have to hasten on with the program, and unless there is something important further in this discussion, we will have to start on another topic.

Mr. Shipman: There is one thing I have been thinking about. I get around to a great many fairs, and especially at the late fairs, and run up against one thing that will make somebody trouble. You are racing on the added money plan. You publish a great big long list of entries, but when the horses come to start you have got from four to six horses to start, and you deal with the horsemen on the basis of the four or six entries. Some day some horseman will say "Where is the balance of that entrance money?" and he will insist that you settle up on the basis of the published entrance list, and you will have to do it unless you take care about it.

Mr. Curtin: The solution of that, Mr. Shipman, is that under the added money plan the check must be sent with the entry. If the secretary takes the entry under those conditions, you are all right, but if the secretary takes the entry that comes in without a check, and such trouble should come up, he is personally responsible for it.

Mr. Shipman: That is the thing I am referring to; they are responsible for that entry.

Mr. Curtin: But I don't know of anything of that kind having come up this year.

Mr. Shipman: It has lots of places—where the horsemen settled, they just used the basis of the four or six horses entered.

Mr. Curtin: Of course, that will come up, and if they advertise other horses on their list, they can be held for it. They shouldn't take an entry unless a man's check is pinned to it.

The President: Gentlemen, if you will permit, we will go on to the next topic, unless there is some other question here.

Mr. Olsen: I would like to ask you a question about the race—to give more money for races in those little county fairs which are all over the country, or can we do something else and make it a success? I would like to hear from some one that don't have any interest in it as a professional horse racer. Can we use just local horses—is that a success, or not? It looks to me that all those small county fairs have got all they can do to pay out, and some of them are running behind. Now, to give four or five hundred dollars in purses, and some of them have got up to three or four thousand dollars, becomes quite a burden, and I am wondering if it will pay out? We have got to have something of that sort, and I would like to hear from some one if they have fairs and use local horses in the races, and how that takes with the people and whether that is satisfactory with the people as an amusement, or not.

Mr. White: A few years ago down at Malvern we had a good deal the same proposition. It was at a time that Omaha had their meetings out at Benson, and they were going to hold their meeting the same week we had a county fair. Being so close we didn't feel that we could compete, so we gave a July harness race meet, and then a fair and agricultural exhibit in September. We had a few people that were knocking on the races all the time and thought that was money thrown away, but we went ahead with our annual agricultural meeting, with mule races and things like that. The agricultural fair didn't amount to much, but we had one of the best meetings in July that we have ever had. With our county fair, by nip and tuck, and not spending anything for races, we hardly paid out; there were no crowds there; there was no excitement.

The President: I think you will find, Mr. Olsen, this to be the condition. It has been my experience in fair work for a good many years that no fair with local horses has ever been a success, and, furthermore, at the present time we all know that we couldn't gather together enough local horses in our community to make one race, let alone three or four or five races. We haven't them in our county, and you haven't them in your county.

If you will pardon me, we will now go ahead with the next topic, a paper on "Baby Beef Calf Clubs," led by W. M. Clark of Marshalltown, Iowa.

W. M. Clark, Secretary, Marshall County Fair, Marshalltown.
Mr. President and Fair Managers:

It is a pleasure to me to have recovered my health enough to be back with the Fair Managers again this year. Together with Mr. Curtin and Mr. Cameron and Mr. Shipman—I don't recall any others—we organized this Association some fourteen or fifteen years ago in the old Savery hotel down here in the lobby one night, and it has grown to its present proportions. My health has been such for the past two years that I have not been able to meet with you, and I am very glad indeed that I can again be here.

The development of the baby beef industry has become so general in the state and is of such importance to the beef producer and the fairs that your president has asked me to outline the plans used in the organization of county clubs. Marshall county has been very successful in this work, so that what I may say is based on our experience in club work.

The first club in Marshall county was organized in the fall of 1916 and eleven calves were shown at our 1917 fair. In 1918 we had twenty-two; in 1919 forty-four, and in 1920 seventy-nine calves were started and seventy-seven finished and shown at the fair.

This department of our fair is under the supervision of W. A. Buchanan, county agent. He gets the boys or girls interested in the work and when they desire assists them in buying a calf. Each member of the club buys his or her own calf without any financial help from the fair association or any other organization. Some may borrow money for the purchase of their calf at the bank or of individuals, but it is their own personal deal. They are not supported by any organization. The object of this being to place the responsibility of choosing a suitable animal to feed on the boy. The age limit of club members are not under ten or over nineteen years of age, and they must be actual residents of the county. Calves must have been dropped between January 1st and September 1st of the previous year, and may be either pure bred or grade, steer or heifer, owned by the club member, his parents or guardian, fed and cared for by the member, and shown at halter. Each member is required to have his feeding record complete to date of exhibition and judging, and to show their calves at the fair unless excused by reason of sickness or accident. The only financial obligation assumed by the fair association is the premiums offered. Prior to this year our awards were made regardless of breed of the calf, but with the large number in the 1920 club we made separate classes for Shorthorns, Herefords and Angus, offered ten premiums in each breed; also a grand champion and reserve champion, all breeds competing. We also give a small premium to each member who does not secure a place in premiums listed in our book. In addition, we give five premiums ranging from $5.00 down to the boy or girl whose calf shows the best care and grooming and is shown to the best advantage in the judging and sales ring.

The breeders of the county donate special premiums in the three breeds mentioned, so that it makes it possible for a member to receive from $60.00 to $70.00 in premiums at a single county fair. The calves are sold at auction on the last day of the fair. This year Chicago, Sioux City, Cedar Rapids, Ottumwa, and other towns were represented. Competition was keen, resulting in an average price of $18.29 per hundred, live-weight. The average weight of the seventy-seven calves fed last year, at the time feeding commenced, was 406½ pounds; the live selling weight on September 17th was 989½ pounds, showing an average gain of 583 pounds each. We furnish free stalls and an exhibitor's ticket to each boy or girl; they buy their own feed while at the fair. What are some of the benefits to the fair?

No other department at our fair is as popular as the baby beeves. Swine breeders will go to see the swine; cattle breeders the cattle; poultry fanciers the poultry, but everybody, farmers, city people, and the children, go to see the baby beeves. The largest crowds we have at the judging ring are when the calves are being judged and sold. We consider it the best drawing exhibit at the fair—worth many times its cost, and any fair that does not have a baby beef exhibit is losing a big attraction and the opportunity of promoting one of the leading educational features of its fair. The evening parade of baby beeves past the grandstand, filled to capacity, was so popular that it was repeated the following evening amid continuous applause, with a few extras thrown in for the five girls who had fed and exhibited the calves.

In the past four years, Marshall county has given a practical education to over one hundred boys in stock feeding. Our college at Ames has taught the farmer to grow two bushels of corn where one formerly grew. Now our baby beef clubs are educating our boys to produce two pounds of meat on the same amount of feed formerly used to produce one pound. So if any of you are fortunate enough to own any of the so-called high-priced Iowa land, do not be discouraged at the declining prices of livestock and farm products—just have the boys join a baby beef club and produce four pounds of meat where you formerly produced one, and you have gone a long way toward solving the high cost of living.

The club work teaches the boys self-reliance, as each one is expected to work out his own problems; it teaches him how to care for livestock; how to show them in the judging and sales ring; it teaches him how to produce a finished animal for the market, and at the close of the contest he knows that his success or failure is due to his own judgment and efforts.

So I say the baby beef club is the greatest educational feature of any fair. As an illustration of the interest taken by the boys of the county and their eagerness to study the methods followed in the club work, early in the morning of the day on which the calves were to be judged, the principal of a consolidated school in the southern part of the county brought six of his pupils, bright-eyed, manly farmer boys about fifteen or sixteen years of age, into my office and asked me to admit them to the fair on their school tickets which were good on the following day, as they wanted to see the baby beeves judged. I studied the question for a moment and decided that if this teacher would leave his school and allow these six boys to be absent for the day, they must be interested and that the benefits the boys would receive would overbalance the price of admission; so the boys saw the judging, and I am told that three of them will be in the club another year.

These boys and girls are not learning to feed and care for stock alone; they are learning to transact business on modern business methods by the buying of commodities used to feed their calves; by shipping their calves to and from the state or their county fairs, and the various other transactions that come up during the year of feeding. It was not uncommon for a boy to walk into my office and say, "Mr. Secretary, will you cash a check for me?" pull out a check book, write and sign a check, and walk out with the currency. You men with gray hair, think of it, a boy of fifteen having a bank account in his own name. Most of us would have thought we owned the world if we could have had fifty cents in our pocket at fair time, to say nothing about a bank account in our own name.

One example of a boy now seventeen years old, who was brought up in a small village, had never had the care of livestock until two years ago, so plainly shows the benefits of club work that I trust I will be pardoned for using a personal illustration. I was at our grounds a few days prior to the opening of our fair and observed a man walking around as though looking for some one. I approached him with the inquiry if there was anything I could do for him, and he told me in broken English that he was waiting for his boy who was shipping his calf back from the state fair. The boys who show at the state fair keep their calves at our grounds the week intervening between the state fair and ours. I talked with him about his boy and what a good thing it was for him to be interested in the baby beef club; how much he could learn about the care and feeding of livestock, and of the benefits it would be to him in the future. Finally the man broke into the conversation with this remark, "Joe has learned more about feeding cattle in the past two years than I have been able to learn in all my life." The boy, the son of a man who a few years ago immigrated from sunny Italy, was Joseph Caputo, who received the first premium at the state fair in the Shorthorn class, reserve grand champion of the state, first in the fat cattle class of his age, first and reserve grand champion at the Marshall county fair, one of the herdsmen's premiums, and first in the Shorthorn breeders' special, and last week was the guest of one of the large Chicago packing houses at the International Livestock Show at Chicago.

This calf weighed 450 pounds and cost the boy $55.00 at the time feeding commenced. His live selling weight was 1040 pounds; dressed weight 668 pounds—showing a dressing per cent of 64.2. The calf was sold to Sinclair & Company of Cedar Rapids at 23c a pound, or $239.20. The cost of the feed used was $96.00, showing a profit of $88.20. Add to this the cash premiums received at the state and county fairs and his profit was $231.20, besides a medal and his trip to the International. But greater than all this, he received an educational profit that cannot be measured in words.

I thank you. (Applause.)

The President: Gentlemen, this is an important topic, and I know you have all appreciated this paper of Mr. Clark. It has contained valuable information for all of us. Many of you are entering into this work of calf clubs, and I know that you want to find out all you can of the experiences of those who have gone thru this work. Now, we are going to open this topic for discussion, and if there are any questions you want to ask Mr. Clark I know he will be very glad to answer them. If there are any points he has brought out that are not specific or clear to you, I know he will answer them. So for a few moments he will leave the topic open for questions. Are there any questions you desire to ask Mr. Clark concerning this club?

Mr. Moore (Wright County): I would like to ask Mr. Clark if the fair association has anything to do with the buying of these calves?

Mr. Clark: Not a thing as an association. The county agent looks after that for the boys. Of course, there are men connected with the fair who are interested in the breeding of livestock, but the fair association don't become responsible for anything except the premiums offered.

Mr. Moore: Is the same boy eligible for two years in succession?

Mr. Clark: He is eligible for any number of years between ten and nineteen for one or more calves—as many as he wants to buy.

The President: Up in Webster county we are establishing a plan much like Mr. Clark's, but we are giving out 24 calves. We have adopted this plan: We have formed a Calf Club association in conjunction with the Farm Bureau and Fair association and the Breeders of Webster county. We appointed a committee of five to go out and purchase these calves. These will have been calved last spring along in March, or as near that time as possible. We are buying these calves outright from the breeders and then are giving the calves away to the boys, by lot. That is, we send out applications to all boys and girls in the county between the ages of ten and nineteen, the same as Mr. Clark does, and they send in these applications, and then we have our drawings in the various townships, and then the one that is lucky enough to get a calf comes to the fair grounds and we give him a calf that has been purchased by the committee and he signs a contract to feed and take care of it, etc., and next fall we sell the calf, and the boy has the right to bid in the calf, or if he does not any profits derived therefrom go to the boy. The money that we have advanced for the calf is paid and then any profits go to the boy. That much is just a little different from Mr. Clark's plan, as he has explained it. But we found this, it was pretty hard work to get enough interest up in our county, because there was nothing of that kind started and we are not a very strong beef or dairy country out there, and so we conceived the idea of buying the calves and making a contract with the parent of the boy, and we then go to the banks and borrow the money. The banks in the county will be glad to finance a proposition of that kind. They loan the money on the contract. I bring this out to show you that ours is a little different method than that specified by Mr. Clark.

Member: Do you think that the boy would retain as much interest in it as if he had his own money invested in it?

The President: They have the interest, because the parent is back of it—he has obligated himself to the amount of the purchase price of the calf, by signing the contract, which is drawn up in the form of a note. In the event of the death of the calf the fair association and the Farm Bureau will be the loser.

Member: In the event some irresponsible party should draw the calf, what is done?

The President: That is under the supervision of the county agent. He goes around to the boys every week or two weeks, and we have a committee in each township or two to see that the calf is taken care of. In the event the calf is not properly taken care of we can take possession at once and without any legal procedure.

Mr. Shipman: I would like to ask Mr. Clark the amount of premiums paid by the fair.

Mr. Clark: Our first premium is $15.

Mr. Shipman: I mean the total.

Mr. Clark: I never figured that up, but we start out with $15 for the first premium, and grade down to $3; and then we give each boy who doesn't get into the money a premium of $3, and then we have this little herdsman's premium; the grand champion premium is $15, and for a reserve champion $10. We pay $45 for the first premium, about $36 for the second, $33 for the third, and so on in the three breeds. No entrance fee or stall rent is charged, everything is free to the boys, except for the furnishing of feed, and they take care of their own calves.

Mr. Shipman: We have a pig club and a baby beef club, and also this year we will put in a sheep club.

Mr. Benson: I would like to ask anybody here if they have ever tried out the dairy cattle club?

Mr. Campbell (Jasper): I would say that we have had in Jasper county, thru our county agent, a dairy cattle club. We put out 32 Jersey thorobred heifers. The club sent down into Missouri and purchased the heifers. They are put out on a three-year basis, and a boy's or girl's note is taken for three years, the parent signing the note, and one of the local banks handles the paper. Last year there were shown at our Jasper county fair these dairy cattle. The American Jersey Club gave $75 in prize money, and the fair association gave $50 in premiums. This year they were shown again at the same place and the same amount of money was put up, and such additional premiums as were necessary for the calves that were purchased the year before.

Mr. Webb (Hamilton): I would like to ask Mr. Clark if there was any record kept on the feeding of these beeves?

Mr. Clark: Every boy has to keep his own record.

Mr. Webb: Is that taken into consideration in the final show?

Mr. Clark: Yes. The question or proposition of deciding is which boy has been able to produce the most pounds of meat for the least amount of money.

Mr. Webb: You hold that good in your pig clubs, too?

Mr. Clark: I think so; I don't know much about the pig clubs.

Mr. Cameron: I want to commend Mr. Clark on that paper. If the boys and girls of today have got to be the future fellows to keep the fair work going, it is to our interest to train them. While we have this boy's and girl's club at the state fair, and while the county fairs are in position to stress that very thing, this paper of Mr. Clark's presented to us this morning lays out to my mind the best proposition that I have ever heard along that line, and I would like to see a copy of that paper sent to every farm bureau agent in the state of Iowa. I think it would be a grand thing, it would be a great incentive, because there are a lot of county agents and a lot of fairs that have not gone into this, and coming from Mr. Clark and coming from a county fair in which we are all interested, in which we are all honored, I think it would be a great thing to boost this calf proposition if we could have that paper sent to every county agent in the state, who could then get in touch with the county fair secretary or manager, and I don't think there is anything that would boost that proposition more than to have a copy of that paper sent to every county agent and fair secretary in the state of Iowa.

The President: That is a good suggestion. The Homestead and Successful Farming have already asked for this paper. I don't know whether Mr. Clark has copies of it, or not, and the Register is also going to publish it, and it will be published in our proceedings. Of course, that is a year coming to us. I think it will be wise for us to entertain a motion that the Fair Managers association go to the expense of having this printed and mailed out to the fair secretaries of Iowa, the farm bureaus, and such other organizations as might be interested. I think it would be a very wise thing for this Fair Managers association to do this and bear the expense, which won't be much.

Mr. Shipman: I expected to see Mr. Clark and ask him for a copy of that. I want it for our county agent, but I will make the motion that our association bear the expense of having this paper printed for distribution.

Mr. Bailey (Black Hawk): Second.

Motion presented and unanimously adopted.

The President: I will say this, that the secretary will have it printed immediately and will mail it out to the Farm Bureau secretaries of the state and the secretaries of the fairs, and if you need additional copies, I think it would be wise to have additional copies printed. Is there anything further on this topic?

Mr. Weaver: I desire to call attention—I don't think it was mentioned in the excellent paper that Mr. Clark has given here—I desire to call attention of the members to the fact that where pure-bred calves are taken to be fattened for this contest, the associations are paying a premium. That is, they offer a premium. For instance, the Shorthorn association, with which I am connected, pays out considerable money in Iowa for premiums. I don't know whether we contributed, Mr. Clark, to your Shorthorns in Marshall county, or not.

Mr. Clark: There was nothing of that kind that came to my attention yet, Mr. Weaver. I will say this, that the Shorthorn breeders of the county—I suppose the Shorthorn breeders of the county, I don't know how far it extends, to be divided among the boys, has not been received yet.

Mr. Weaver: I want to call your attention to the fact that pure-bred animals so taken by the young men or young ladies upon application to the association, and I think the other breeding associations, at least the Angus have the same rule we have, contribute quite a sum of money to the Iowa clubs for the benefit of the various calves taken from the Shorthorn association. I simply call your attention to the fact that any one of you who go into it, a small reward may be had by making application to these associations.

Mr. Young: What do you require in order to get assistance from those associations? So many entrants, or what?

Mr. Weaver: No sir, regardless of number, we pay the premium.

Mr. Strayer: The association requires the number of cattle shown and the owners' names, and they will pay $1 per head for all shown and $25 premium for the champion bull and $15 premium for the champion female. That is what we received this year. In 1919 in Black Hawk county we had a Shorthorn club of 40 cows and 40 calves, and this year we had a club of 101 Shorthorn cows and calves, and it has been the drawing card of our show. We have made the premium for some of the boys as high as $45, and we require the boys to sell them or buy them back, as they see fit, and some of these boys have realized as much as $281, and they have been resold at an average cost of $271.

Mr. Pike: Most counties have a pure-bred livestock association, and some of them the secretary is the county agent, and I would suggest that a copy of that letter go to the livestock associations.

Mr. Barber: I wanted to tell you about how we raised our money for the calf club this year. The county agent has gone out and bought the calves, and he has refused to buy any calves except good ones. The livestock breeders have been very liberal in selling calves—they run around $100, and he has bought only good stock. We have offered premiums for Herefords, Shorthorns and Angus. We are offering the same premiums for the calves of any breed, pure-bred, outside of Cerro Gordo county, and we are offering champion and grand champion prizes, running about $300 altogether. We went to the five banks and the clearing house in Mason City and got the money, and it hasn't cost the fair association a cent.

Mr. Clark: In reply to the question Mr. Shipman has asked, as near as I can remember the premiums they aggregated about $400. The total premiums given on the baby beeves.

The President: Are there any other questions, gentlemen? This is a very important subject and I am sure we are all getting some good out of this.

L. B. Urice: We have tried both pig and calf clubs. If you want to start these under good rules and regulations, if you call on the state college at Ames they will furnish you with the best list of rules you can get. We had a little confusion this year on different awarding of prizes in the finals, but if we had started out right we would have avoided a great deal of the trouble from the start.

AFTERNOON SESSION, DECEMBER 7, 1920.

Two O'Clock, P. M.

The President: Gentlemen, we will come to order now and proceed with the program. There will be a little deviation from the printed program, for the reason that some of the papers are not just ready, so I am going to call on Mr. H. J. McIntosh, who is manager of the Agricultural Bureau of the Omaha Chamber of Commerce, who will give us a short talk. Mr. McIntosh.

H. J. McIntosh, Agriculture Bureau, Omaha Chamber of Commerce.

Mr. President, and Gentlemen of the Fair Association:

This bunch of cards I have here is nothing of importance. There is nothing here bigger than a two-spot, so you need not think that I am going to spring anything on you.

I regard my being here as being something of, we will say, a piece of humor, not because it is a joke on you, because I am not serious, and I am sure it is not because you are not serious in what you are doing; but the world is so full of unusual things at the present time, and things come around by a mere happenstance in so many cases, that we are not always able to give a good reason for the faith that is in us.

Now, my coming here is a mere happenstance, and it comes about in this way. This past spring when I came into Omaha, or back to Omaha, after sixteen years spent in farming and cattle feeding out in central Nebraska, the people down there had become alive to the fact that agriculture is of primary importance in the world, and that no city, or no community, could have permanent prosperity unless the agriculture which produces the food for the people, and, up to this time, the labor for the largest number of people engaged in any industry, is prosperous. In Nebraska we have had a rather peculiar condition of things, dating back for a number of years, quite different from what I noticed in Iowa, for the reason that Iowa has never yielded readily—the farming population of Iowa has never yielded readily to those isms and calls and agitations that take root rather easily in less favored districts, and while I need not apologize for Nebraska,—I didn't make it,—Nebraska is not favored in its natural resources to compare with the country east of the river of which Iowa is the garden spot. So back in the '90's when we were all more or less in hard shape, there took root in the Nebraska mind, the Nebraska farmer mind, considerable of belief that other men's hands were against them, and that he was the under-dog in the fight, and that he was abused more or less, and so we have the Farmers Alliance movement there, and of which you know and which became dominant in the state under the Populist party for a number of years. Now, that was based largely on a belief that the farmer was not getting a fair chance; and big business got to be a bug-bear, but a great deal of that spirit has passed away, and a great many of our farmers are absolutely fair to other interests, but there has been a feeling in Nebraska stronger than most places that the city interest and the farming interest were not co-ordinated and didn't run along the same lines, and so on.

Now, when I came in, there was a movement under way to get a connecting link somewhere that would link up the notion that all business interests are on the same basis, and that the farmers' interests and the city's interests were co-ordinate and not opposite; and they said to me, "If you will take charge of an agricultural bureau in the Chamber of Commerce we will let you go ahead and see what you can do with it," and I accepted with the theory that the work we should do should be good-will work, to cultivate friendly relations between the agricultural and commercial interests of the city, and so I began to inquire what directions we could go to be helpful to agriculture, and what directions can we go in the city that will bring a knowledge of agriculture to the city men who really need as much coaching as any farmers can in reference to the interests of the city, and among the other things we believed that we could encourage the promotion of county fairs, and so I wrote a few little promotion letters out to our friends in the western part of Iowa. I was too afraid of you to go all over the state; so I went all over Nebraska and over part of Iowa, passing on some good suggestions that came to me for the promotion of fairs, and in doing that I came to think more seriously about fairs than I had ever done—not because I had not been mixed up with them always, but we get mixed up with the work we are doing in such a way that we undervalue what we are doing, and I confess when I acted as president of a district fair in Hall county, Nebraska, and in other places where I have held official positions in fairs, I have asked myself many times whether it was worth while. I have written a good deal about fairs. When I was editor of an agricultural newspaper, the Nebraska Farmer, I used to write little editorial articles calling attention to the educational value of county fairs and of all fairs. And yet I didn't realize, as I do now, the value of the fair. And so I wanted to speak to you today about the value and importance of the work you are doing, and incidentally to suggest some of the things that I think might be done far more generally and far more effectively than they are now done. And this county fair proposition, I want to give you just this angle of it: Take our school system, and you take the high school—where would the high school get if the primary grades were all wiped out? How long would the high schools last if the primary grades were wiped out? Why, just one set of boys and girls would get through the high school, and then you would be done. Now, that is exactly the relations that the county fairs sustain to your state fairs, in which we all take so much pride. I know when we get home from the International at Chicago, we feel sort of sorry for a state fair, we are in an apologetic mood; likewise when we come back to our county fairs after being at the state fair, we are sort of sorry we are in the fair business, and that our county fair is only a county fair, and it is apparently so small, and there is so much of our livestock that comes in that just isn't classy and doesn't look good, and so on, but we must remember that it is the primary grade in the system of developing this whole agriculture and livestock industry into the high ranks we have got it now. And so this primary work is really the vital thing in the whole case, and if at any time you feel discouraged about the work of your fair, and it comes along one of those drizzly, wet weeks that sometimes hit you, and the people forget to come, and you stand around there shivering just a little, and you know the gate receipts won't pay out, and all that sort of thing that we all know something about, keep it everlastingly in mind that you are doing your best, that the very basis of the livestock and agricultural product business is the fair, and that it is through your work that we build up all of these other things.

I think you are organized in Iowa to carry on your work rather better than we are in Nebraska, but I am sure you are all familiar enough with the Nebraska situation that I need not make a comparison; but I am going down to Lincoln the first of January when we have our meetings there and will try to suggest to our Nebraska people that this is the automobile age, and that a new situation has come forward in the management of fairs, and that these fairs ought to be near together in order to co-operatively build up each other. Now, we had the idea just a few years ago when I was trying to direct a fair, that we must choose a date that would not conflict with anybody or let anybody conflict with us. Our fairs were about thirty-five miles apart, and if that county had a fair this week, we couldn't have it, and if this one had it this week we couldn't have it, and we had a whole lot of trouble to get in there where nobody else wanted the date.

I have come to know that fairs do not compete with each other. It is true that some men situated on the border line will prefer one organization, and some will prefer the other; but I want to give you this suggestion from two angles. We must hold two nearby fairs the same week from now on, and we must do that for two or three reasons. As I said before, it is the automobile age, and it travels faster. Now, there are six days a week, and I don't know any county fair that has over two days of actual fair, which gives us a preparation day and two days of attendance—and there you are. Now then, you attempt to hold your fairs on Tuesday, Wednesday and Thursday, and you consume a week. Your concessions have only two days of patronage; your amusements have only two days of patronage, and necessarily those concessions and amusements cannot pay you the money that they ought to, and cannot give you the amusement that they ought to give you, for the money you can afford to give them. Now, what are we coming to? You men believe it right now, but what we are coming to is right this—two fairs held within reasonable distance, 35 or 40 miles of each other, will arrange to hold their meetings the same identical week, and they will co-operate in their concessions and amusements so that these concessions can fill their dates here and go to the other fair and get four days of patronage in the week. Your amusements can sell to you cheaper because they can go to two fairs and get four days of patronage, instead of two. That is an economical proposition. And the exhibitors of livestock will do the same thing. Your winning herd will go from this fair to the other and make two shows in one week, and if they are real good ones and have their heart in it, they will go to another circuit and make another two fairs, making four fairs in two weeks, and that is about as long as any farmer can afford to go onto the fair circuit in one year. I offer you those things as a coming business proposition in the conduct of fairs.

The next thing I want to call your attention to is the relation of fairs to rural amusement. Some of you who have had my letters during the past year know I am—I am willing to be called a critic on the idea of rural amusements. I am going to talk to the association of county boards and county clerks down at Omaha tomorrow on rural amusements. I am going to tell those county fathers that their greatest duty, aside from the business that is provided for them to do by law, is to take hold of rural recreations and amusements. Now, in Nebraska around our large towns we farmed out rural amusements to men who are so low down in the scale of animal existance that they used and owned regulated dance halls and the beer saloon to furnish local amusements. Thank God, that day has gone forever! The beer saloon is banished even from Nebraska, and I will say to you people that I absolutely would not live in such a community that would deal in alcohol in any form except in the arts. But that is neither here nor there.

I tell you that from my right of experience in agriculture, not as a big farmer for the best years of my life, but as a life-long student and teacher of agricultural affairs, that the one draw-back to agricultural life is the lack of recreation and amusement. Now, we may think that is not so, but you just get a picture of the farm life, six days in the week with no companionship except his own wife and children and the team that he drives and the dog that licks his boots. That is not natural. Man is a gregarious animal, and society is the dearest thing furnished to him—human companionship. God made man the only animal than can laugh. A joke springs naturally from the human heart, and the smile and laughter of children, and the companionship of wife and neighbors, those are the things that are worth while in life. We complain about the boys leaving the farm, and the girls leaving the farm, and men leaving the farm, and families moving into town, and there is an absolute fear—there is an absolute fear in the hearts of thousands that the farms will be abandoned and the food supply will be scarce because the farm will not be tilled. And they tell us it is the bright lights that attract them into the city. It is human companionship that is absolutely dominant in the human heart, that is what attracts men into the towns. And I have got to say that we have got to regard farming as not a business, although we are making a horrible clamor in Nebraska, too, about the protection of a business, about the cost of production plus. But farm life is not a business, it is a manner of life, and unless a man loves the farm life, loves the outdoors, loves the trees, loves animals, loves all of the liberty and beauty and comfort of the farm home, he will not stay on the farm. It is not a place to go to make a fortune, and I know men personally who have made a million dollars while I have made a bare living, simply because they loved business while I loved agriculture. And that is the common human experience. It is the love of the farm life.

Now then, the thing that will make the agricultural life worth while is the social side of it. Amusement and recreation which we have not on these western farms. And the county fair affords the finest, and the only, so far as I know, opportunity for a holiday week in our farm life. The things of the fair, the livestock, our crops, our neighbors, the home folks, are the things that make it worth while. We go off to a state fair and we don't feel at home. I was lonesome in a crowd of 75,000 people down at our state fair this fall. I go out to our county fair in Hall county where I know everybody, and I go out there to go home. When I go to the state fair I am alone. It is at the county fair where neighbors get together, where people know each other, people who understand each other, who call each other Bill and John and Mary, and say "Hello" and have a fine, neighborly, social time, that makes life worth the living. You cannot make a fair attractive without amusements at the fair, and it is these fair amusements that I know are your greatest puzzle and the hardest things to solve. You can get up an exhibition of hogs and corn and cattle without much trouble, because you know where to put your hand on them, how to arrange all of the pens and facilities for showing and judging, and any such thing; but the amusements you have forgotten. You have satisfied yourselves—and when I say "yourselves," I mean all of us —we have satisfied ourselves to go to town and buy some amusements for our fair. I think we cannot get along without buying our amusements, but the amusements which please us most are the things which we do ourselves, things we are interested in.

Now, I have something to suggest to you. I never like to make a criticism without offering the way out. Every community has a resource for amusement, which if assembled and put to work will surprise you in its results. The other night I went out to a municipal concert in Omaha. I never was to one before, and it cost nothing, and I went down. Five thousand people packed in our auditorium, and the best thing they had was a little show staged by a bunch of Rumanians who are workers in the packing house at South Omaha. Men and women came in there with their native costumes on, and they gave us their native music and a Rumanian folk dance. Their costumes were black and white, with skirts on the men that fluttered a good deal when they danced, and the simple thing about it was that it was nothing more than what we called "Ring Around the Rosey" when we were children, and they danced with a lot of enthusiasm. Their folk songs, strangely enough, had no—well, we will say they all sang the air, there were no parts to their music, the men and women all sang their native songs in that way. Now, you could take a Scotch community or an Irish community and find some one in there who can give you the Irish jokes and the Scotch reel, and possibly if they are artists they could give the sword dance or the Highland fling. I can tell you right now that Glen Gordon of Omaha can stage one-half hour of Scotch amusement and entertainment to the King's taste, and it will be as good in the day time as in the night time. I saw a big Hebrew girl, Miss Deliebenfels of Davenport, dance the Highland fling at a Burns celebration with so much enthusiasm and so much inspiration to joy that there is no man or woman in the world that wouldn't have enjoyed that for ten minutes. And so it is all along the line. We neglect some very simple things. There isn't a man in Iowa that hasn't pitched horseshoes, and you can get more absolute enjoyment out of pitching a game of horseshoes than you get out of any horserace. And in saying that I do not belittle the horse race, for we couldn't get along without the horse races. And your baseball games are a great attraction, and when your home nine stays at home that fair week and defies all comers, it is an attraction.

And community singing. There is not a time in the history of the world when people are fonder of music than just now among the American people, and when you get thousands of people together with a good leader and a band to help them, and ask them to sing "America" or "Old Black

Joe" or "The Star Spangled Banner," and all those things, and have them get up on their feet and sing and enjoy life generally, they go home feeling that they have had something worth while—because they have been a part of it. That's the idea. And that is the idea of community amusement. It constitutes the best advertising medium that any fair can have. You have got to pick your talent. You can find men or women here who can do something, and you get them to come together and help you. You have got to get a chorus together and train them, and they go home and cackle about it and tell their neighbors that they are going to be in it, and it is just absolutely the best advertising in the world, and when it is pulled off it is an amusement that we can share ourselves, for we have made it. That is the sort of thing that is open to us, and which can be carried on.

Now then, this promotion business, just a word on it. I have written to some of you men about the promotion business. You cannot organize and keep together and make any business successful by working at it one week in the year. You cannot promote any business without a promotion fund. You cannot promote anything without somebody to do the work, but this is a day of duplicating machines and stamping machines and printing machines. Every county fair secretary must have a mailing list, and the means for using it. That means may be used only once a month —have a girl come in there once a month with a duplicator and mail out your literature to everybody and reach everybody personally with something about a fair. You say you are going to have so-and-so amusements and send it out to them, telling them to plant something for the fair, how to plant it, how to give it a little attention. Harvest comes along, and tell them to harvest something for the fair, how to harvest it, how to take care of it, how to show it. Those little things keep the interest perpetually before the people. It doesn't matter especially whether the people who get that thing act on it, but their interest is renewed.

Now then, interest them in the producing of things for the fair, and interest them in producing the amusements for the fair, and you have got your whole community interested all the time, and when the fair is pulled off they simply cannot stay away. Of course, it will be a busy time. No doubt it was then like I was one year. The fair was coming on and I wanted to go, but the alfalfa farm wasn't obeying the regulations, the alfalfa hay was just properly matured and had to be cut on the first day of the fair. We started out early in the morning and by hard work got the forty acres cut and shoved it together with the sweeps and then went away and left it—as fine a bunch of hay, 30 tons probably, as you ever saw, and it seemed to be getting along fine, the finest kind of weather, and we had a nice fair to attend. In those days before the war we had a German Day, when it was permissible to have such a German Day, and they all gathered there and had some German speeches and some German songs, and we had a fine concert and a fine crowd, and everybody enjoyed themselves. But the last hour of that fair a storm suddenly came up, as you know they do out there, and we had an inch of rain, and my alfalfa hay was worth that (snapping his fingers). That happens in our carrying on; but, shucks, that was just a little bit of experience, and you got up and agoing again, and it's all right.

Now, these are the things I wanted to say to you. I had a long story to tell, but I know you don't have time to listen today, and I don't want to tell you all I know, and a lot I only think about, but I want to impress upon you these three things: The co-operative effort between fairs; second, the local amusements for amusement and recreation in a rural community. And after all we can say about the educational side of fairs and the upbuilding of our agricultural industry, the thing that builds up the rural spirit is the best thing in the world for our respective communities. See to the building up of recreation and amusement in the country. And, lastly, the promotion business. These are the three things that I wanted to talk to you about. The business end of it I know you all understand, I know it is well taken care of, and it is like all the rest of the things in Iowa that we look at from across the river; it is well taken care of, and while you may think we are just a little jealous of you, we are not, we are proud of your success, and we wish you could go on to greater and better things than you have ever dreamed of.

I thank you, gentlemen (Applause.)

The President: Mr. I. S. Bailey, I am going to call on you next for your paper "Decorations for Merchants' Booths and Automobile Exhibits." Mr. Bailey had an experience with a foreigner who came in to his fair to do decorating, and we will hear of his experience and his success.

I. S. Bailey, Secretary, Grinnell Fair Association.

Mr. President, and Gentlemen of this Convention:

FAIRS AND EXPOSITIONS.

What can be accomplished within the financial limits of the County Fair management to insure substantial success? That seems to be the question of the hour with County Fairs all over the United States and Canada. There may be those who have the past season been favored with good weather, good roads, and a sensational act and may feel they are in a position to answer the question by submitting their 1920 statement. Can they? The shrewd fair manager of experience will answer "No."

We have but to be reminded that the newness will soon be erased from the grandstand, the novelty will wear off, the flyer will surely be killed and the roads some time will get impassable. What then? The answer —a fair that will stand upon its own merits, irrespective of a bad race program, a dead flyer, or what not.

Myself and others here perhaps have heard of Mr. Dickerson, manager of the Minnesota State Fair. Mr. Dickerson is generally conceded to be one of the most progressive, shrewd, and capable fair managers in this country. He has succeeded in injecting into the Detroit show originality and newness that would seem to the casual observer as leaving no room for improvement. Yet he says: "Our press department has foundered on the same old stuff and we have nothing really new that the Michigan

State Fair has not offered. I think there are several possibilities which will afford an endless number of features which need but new surroundings, and different settings, to make of an old feature something really extraordinary.

At this time, the County Fair has a field all its own. The opportunity and the possibilities are so great that the unfolding of them would stagger the imagination of the most enthusiastic director. To the men of limited foresight and inexperience may be placed the blame for the failure of the County Fair at the very time it should have taken on new life. Upon the shoulders of you men gathered here with one thought and purpose, with open minds combined with a purpose worthy of your most ardent effort, will rest the future of the County Fair.

In striving to better conditions, financially and substantially and in suggesting changes, new ideas and features, may I not remind you of the changing conditions which so reacted on the County Fair of the past and must be taken into serious consideration each year in reckoning with the future. It was these changes and the failure to recognize them which caused the fair managers of a few years back to fail utterly. It must be the appreciation of these important yearly changes that will insure against failure.

When the County Fair had reached the pinnacle of its success, horse racing was a feature—if not approved by all was opposed by none. The great majority owned a good horse. That was the answer to the universal interest in the race program. Few of this generation who boasted not of some sporting blood! The abolishing through legislation of betting whether we care to admit it or not, had a tendency to destroy interest in breeding and racing and seriously affected the gate receipts. That racing no longer was considered by the masses of paramount interest there was no mistaking. The Fair Board, composed in most cases of farmers, had not kept in step with the trend of public thought and with ideas beginning and ending with the raising, racing and showing of stock knew not in which direction to turn. Failure was inevitable. Not only was the County Fair so affected but several of the great State Fairs were saved from ruin by installing big men with big ideas who succeeded in focusing state-wide attention through other channels, and carried out along ideas suggested by the showmen of America, but executed by men who had made a thorough and systematic study of the World's Fairs for several years.

Recent statistics compiled from data accumulated by expert and successful directors of expositions and fairs prove beyond a question of doubt that the Exposition as a County Fair feature has become the most potent factor in reckoning to a degree of certainty the results. In my years of experience, associated as I have been in that time with the most able men and competent directors, there has yet to be recorded a single instance when the Exposition as an added feature failed in increasing the gate receipts. To more intelligently discuss with you my subject, "The Exposition and What It Means to the County Fair," we must go back over a number of years when the County Fair, aside from the Circus was the only event of sufficient importance to attract attention from the farm or change in any manner the regular daily routine life of the farmer.

That we may focus attention and get directly to facts upon which you may be able to base conclusions regarding the Exposition, permit me to review the Grinnell Fair Association, its grounds, buildings, and financial conditions prior to, and following the Fair of 1919. Not that we submit this as a model fair. It was hurriedly planned and insufficiently financed. But the Grinnell Fair will give you food for thought and when you plan the 1921 show, you will find much that will serve you in the experience of Grinnell.

First we should draw a pen sketch of the grounds. The grandstand had been built many years and was not nearly large enough, and the buildings once used for housing exhibits, constructed without the slightest thought as to light, ventilation, comfort or convenience. All had combined to kill the ardor of the most enthusiastic supporter. Barns and stables there were, but not in good condition. The Grinnell Fair Association owned its grounds, but was without adequate buildings. Such a picture we must admit was most discouraging for the Board to pass upon at its first meeting in 1920. What fair manager would have had sufficient courage to make the effort? As a compromise with tearing down the old buildings and selling the property, or trying another fair which paid hardly more than expenses, it was decided to try the Exposition feature. It was freely stated by business men, other County Fair managers and supporters that in a town of 6,000 people, the very best that might be expected would be thirty exhibitors.

To be exact and get down to detail, there were actually 102 manufacturerers and merchants in the Grinnell Exposition. To provide for them, a line of Bungalow Booths were erected. These booths were constructed along a promenade which was 1,200 feet in length. The booths measured 8x12 feet with a 10-foot roof. The booths were waterproof and separated only by a railing of 2x4s. From the roof of each booth there extended an attractive two-color awning, the entire length of booths being lighted inside and out.

The promenade was slightly over 36 feet in width and this avenue was literally roofed with colored pennants. At intervals of 20 feet there hung great chandeliers measuring 6x8 feet and containing each 100 60-wt. lamps. Leading from this promenade, were the several buildings that had been completely hidden from its dismal background by decorations that were extremely artistic and beautiful. Leading from the very center was the Moon Garden, a feature more generally appreciated than anything that has yet been offered the public as a place of comfort and convenience. This garden was shaded by great oaks and at night thousands of colored lights illuminated the many tables where visitors spread their food and enjoyed a day and night picnic and discussed the most vital subjects of the hour. There were chairs and tables for 2,000. In the center mid trees and beautiful lighting effects, played an orchestra. Singers entertained. And it was all free.

The Poultry Show filled one end of the promenade and this feature was given as much attention in decorations, which were done in green, red and yellow, as the art hall, or the horticultural buildings which from the standpoint of beauty were veritable dreams of loveliness.

At the extreme other end was the automobile show that for arrangement, construction, and decoration has never been equalled in the state. This building, or frame work, was 80x326 feet, covered and walled by canvas. The interior was completely enclosed in white lattice work. Overhead was a solid mass of imported beach leaves dotted here and there with yellow poppies, over 3,000 being used in the decoration. In this show were fifty-two models of cars, tractors and trucks. Think of that for a town of 6,000.

To the usual fair ground and grandstand act there was added a feature that is only possible in the smaller cities. A historical pageant employing 300 people, with a ballet of 100 charming young ladies and every man and woman and child in the spectacle in daily touch with the people all over the County. Give this some thought. The spectacle was dated for but three performances but to accommodate the crowds four were given and on at least two nights as many as 3,000 people sat on the dirt track unable to get seats in the grandstand or the added bleachers, over 3,000 being erected specially for the pageant crowd.

The Exposition was a success from every point of view as a beautiful show. The cost of construction of booths and automobile show was estimated at $31.50 for each exhibitor for space used. The pageant paid for itself, the added feature increasing the gate receipts. The public and press proclaimed it the greatest fair Poweshiek County ever held. Experiments are oft times costly. Results are uncertain. The shrewd fair manager will base his calculations on established fact. There can be but one possible element entering into the success or failure of the Exposition combined with the County Fair. Even then it is possible to insure against that. I have reference to rain insurance. If then the combination is in truth without a recorded failure and sufficient evidence can be brought forward to support that contention, why not an Exposition with every County Fair and a state-wide success? Here comes the rub. Communities are different. Many county fair boards are made up of men whose personal interests are so centered upon one idea, one feature, a real worthwhile Exposition would be impossible.

Again, it requires an educational campaign among merchants and manufacturers as well as the farmers. It requires hours of intelligent, thoughtful, experienced consideration. The manager must have his hand on the pulse of the people and familiarize himself with every detail of such a show. Unlike the National Advertiser the man accustomed to direct returns from his business, must be shown the futility of attempting to establish a firm foundation on "Bargain Sales." Neither must a fair expect to enlarge and build a great Fair and Exposition and pay for it from the first year's gate receipts.

The County Fair and Exposition should be made a county event and of local interest. Having faced for several years the men of "Can't" and having watched their mournful predictions fade away like snow in the melting sun, I am convinced that the County has but to annex the Exposition feature to combine the entire community interest and insure substantial success.

The President: Are there any questions you wish to ask Mr. Bailey? If not, we will pass on to the next subject.

Is Mr. Pearse in the room? We will next hear from Mr. J. R. Pearse of Pearse, Robinson & Sprague, on his paper entitled "Getting results in planning the modern fair." Mr. Pearse.

J. R. Pearse, Landscape Architect, Des Moines, Iowa.

Mr. President and Gentlemen:

Recently I heard three rules for a public speaker, and it seems to me they are pretty good rules to follow, and I have decided always to bear them in mind and try to follow them. The first is to stand up so everybody can see you; second, to speak up so everybody can hear you, and the third is to shut up so that everybody will like you. (Laughter.) Now. I want to shut up as soon as I can.

You men are, of course, here from a number of different professions. Some are farmers, some are merchants, some are doctors, lawyers, etc. We cannot tell from the looks of you just what you are. There is a way of telling, however, from a method I heard recently, what a man's religion is by the car he drives, and these are the rules we should follow: You can always tell that the man with the Cadillac, the elite of the motor world, is an Episcopalian because it is an aristocrat. If a man drives a Buick he is a Methodist because it is so noisy. The man who drives a White Steamer is a Baptist because it takes a lot of water to run it. If he has a Ford, he is sure to be a Christian Scientist, because he merely thinks he has a car. (Laughter.)

The subject as assigned to me, "Getting Results in Planning the Modern Fair," may give you the impression that I have in mind to tell you how to run your fair. That I cannot do, nor is there any one who can. Your fair is governed and your exhibits, concessions, free entertainments, etc., are based upon the existing conditions in your community. You know those best and you know what the traffic will stand.

Do not misunderstand me, I would not under any circumstances try to tell you how to run your fair. You know how to run your fair. I can only suggest to you how to plan your fair in the arrangement of buildings, entrances, exits, parking space, traffic arrangements, and the location of each and every unit on your fair grounds.

You are interested in the development of one fair ground. We are asked to be interested in many fairs. Each of these is different, no one plan would fit two fairs any more than one suit of clothes would fit two men. A separate plan should be worked out for each fair.

We find on many grounds an attempt of the duplication of an arrangement of buildings or the adoption of a building plan exactly like that found on another fair, with a result similar to the man who employed the Chinese tailor. He bought the cloth and gave this to the Chinese tailor with an old suit of clothes to be used as a pattern. The new suit was an exact duplicate of the old suit, even to a patch in the seat of the trousers. Exact duplication of fair buildings without intelligent adaptation to existing conditions copies defects as well as perfections.

The successful modern fair is carried out along the lines of a definite plan, practically the same ingredients are used as in the old-time fair, but the mixing is not the same. It is the arrangement, the accommodation of the people, and the appearance of the modern fair that makes it different from the fair of yesterday. It is this difference which places the stamp of approval upon a successful fair.

A prominent actor was once asked "What person in the audience do you try hardest to please?" "Little Johnny in the front seat," was the unusual reply. "If I can please the boy, I can easily please his parents." In planning future fairs, is it not little Johnny in the front seat whom we are trying to please? Johnny is the unprejudiced critic of our endeavors. He has no political friends to please, he caters to no one, his tastes are exceedingly varied and he either likes or dislikes our fair for some definite reason, and, fortunately for us, this reason is usually the basis and foundation of our success or failure in the fair world.

It is our problem to anticipate Johnny's visit to our fair and to provide his pleasure from entrance to exit and supervise his menu from soup to nuts, and our greatest reward is to receive from his unbiased opinion the statement, "I've had an awful good time at the fair."

Traffic arrangements are one of Johnny's first troubles—his pa takes a long while to get through the crowd with his car. There are too many people waiting to cross in front of the car, who get in the way; it takes a long while to park the car, and then it is parked in the corner of the grounds where Johnny has to go and get the forgotten bundle that mother left under the back seat. Unconsciously, perhaps, Johnny asks himself, "Where shall I go?" and here our previous efforts in anticipating his visits and his needs answer this question for him before it is asked.

The arrangement of the buildings, the location of the concessions, the proximity of the midway, and the distribution of the open-air exhibits must be in accord with an unconscious plan which Johnny has stored up in his mind as his idea of what a good fair should be. He knows when it is right, but he does not know how to produce the results. It is this arrangement, this plan which must be anticipated months and years before the lad's visit so that when the time comes he can enjoy it and be satisfied.

Livestock, grain, machinery, poultry, boys' and girls' club work, concessions, grandstand, midway, sanitaries, and exhibits of all sizes and descriptions are passing under Johnny's criticism. His tastes must be anticipated, his likes and dislikes must be taken into consideration, and, besides, we must provide him with the best in educational advantages and entertainment in order that upon his return to the farm he shall enjoy his work and be encouraged to come back to our fair year after year.

Throughout our fair, consistent and intelligent planning must be done in order to anticipate the present and future needs. Little Johnny of today is the big John of tomorrow, bringing his little Johnnies to see our fair, and our anticipation of future development of the present-day fair is what is going to make these boys like our future fair as their father enjoys the fair of the present.

The lad of today with his candy and bag of peanuts watching with open-eyed astonishment the big hog, the sleek cattle, and the shining horses is the big John of tomorrow leading the blue-ribbon bull or the prize stallion through the judging ring, making little Johnnie gasp at the results of his achievement. The impression he receives from our fair today is the impression that he carries away and retains until he returns ten, fifteen or twenty years hence and brings exhibits to our fair and assists us in that we are striving to attain—an exhibition of the best in agricultural achievement.

Future improvements for our grounds must be planned for today in order to bring our fair up to the standard which big John will demand tomorrow. Unless we foresee his needs and his desires at our future fairs, he will be as badly disappointed as if he had not received the attention which he deserves at our present fair.

The fair of today stands for a great deal more than the fair of yesterday, and the fair of tomorrow will mean just exactly what we make it mean, and no more.

Attendance at a fair is an education in itself, and must be balanced in exhibits and entertainment just as an education. Too many races, too little live stock, too many concessions, or too few agricultural products is just as bad for Johnny as too much algebra or too much grammar.

The concessions, races and free attractions are a necessity, but they are only a means toward an end. The end is to give the farmer, the fruit and vegetable grower, the mining operator, the lumberman, the manufacturer and the merchant an opportunity to place before the public their responsibility and their place in the great scheme of production.

The fair is a far-flung competitive market where every variety of product and every type of machinery is on display. On some fair grounds as high as twenty acres is turned over to the jobbers of tractors, engines, automobiles, silos, farm implements, lighting systems, heating plants, sewage disposal plants, dairy equipment, and labor-saving devices for the home.

All this display of equipment means an economy of time and money to the farmer anticipating purchases, and on the other hand the industrial concerns reap a harvest of orders as a result of their display at one place during one period.

It is the farmers' best chance to reach the largest number of people at one time, and it brings the public in contact with the best methods of production and the finest produce and live stock of the leading growers and breeders of that section.

Of all the producers, the manufacturers and merchants have the best chance to display their wares during twelve months of the year, while the farmer is placed under a decided handicap unless he is given an opportunity to display his wares at our fairs.

The pure-bred live stock man grasps every opportunity to display his stock to the public He knows that his blue ribbon animal gives him the advantage of placing his own price and on his own terms.

The day of other agricultural products is just coming into its own. Last month at Council Bluffs, Iowa, was held the Mid-West Horticultural Exposition, where nearly an acre of exhibits was displayed, coming from seventeen middle-western states, and representing the choice products from hundreds of orchards and truck farms.

The International Hay and Grain Exhibit at the stockyards last week, with $10,000 given in prize money, was only inaugurated last year, and the wide extent of the products from hundreds of exhibitors gives evidence of the commercial advantage of agricultural exhibitions.

Definite results in the planning of fair grounds can only be accomplished when there is a full and thorough cooperation of the three professions, engineering, landscape architecture, and architecture. The engineer to survey the grounds, and after the plan is made to stake out the buildings and work out the problems of grading, drainage, sewers, water and lighting; the landscape architect to plan the grounds from the engineer's survey, to locate the entrances, exits, buildings, roads, drives, race track, exhibit and judging areas, and also plan the planting; the architect must work with the closest cooperation of the engineer and the landscape architect to design adequate buildings in size and shape to hold the present and future exhibits. It is also very necessary in this cooperation to design buildings which will be harmonious with the entire scheme of the landscape plan, to fit the location chosen for them, to have a general type of architecture adopted and a similar type of material. There is nothing more out-of-place than to have one building of brick, another stucco, another hollow tile, and the rest of frame construction. It is best, for example, to use all frame construction with one building of permanent construction looking forward to the time when all the buildings will be fireproof and indestructible as soon as the funds will permit.

I should like to call your attention, right at this time, to a type of construction which you men all probably have heard of, and I venture the assertion that it is the large type of construction of the future, and that is the reinforced concrete building, without forms. It is a patented process which is patented by a man in Philadelphia, and many of his type of buildings are being constructed at the present time in the middle west. He promises for those who place these reinforced concrete buildings, which are fire-proof and indestructible, a structure comparable in cost to frame construction, and at least 25 per cent cheaper in cost than the reinforced concrete building made with forms.

Therefore, the value of a thorough cooperation of the three professions is easily shown, as any professional jealousy on the part of any one of them, in order to satisfy a certain professional whim, may cause the fair board to needlessly spend large sums of money.

Results and only results characterize a successful fair. The best and most successful fairs in the United States and Canada today, whether they are large or small, are those which are being worked out on the basis of a definite plan,—a program of development which is being followed each year when new buildings are being added or changes made.

To build the most successful fair for the future, it is necessary to adopt a definite plan worked out along the lines of experience and professional capability. A combination of the two is the only method of getting results from the modern fair.

When I speak of experience, I mean the concession man is the one who knows best how to handle concessions, the race-horse man knows the requirements of a track, the aviator and fireworks man have definite ideas as to the roof design of the grandstand, the stockman knows how best to have his stock exhibited, and the pure-bred livestock auctioneer is the final authority as to the best design of a sales pavilion. They all know the results they want, and they admit they do not have the technical training to produce the required results. It is the harmonious combination of all these best ideas, as compiled and used by the landscape architect, architect and engineer, in the design of the general layout of the grounds and individual buildings that bring about the quickest and best results on the modern, up-to-date fair grounds.

The man most responsible for the carrying out of this program is the secretary or manager of the agricultural fair. In all our agricultural communities there has been no one who has contributed more in the way of inspiration, enthusiasm and far-sightedness than the secretary of the agricultural fair.

Many times working with little or no compensation, he has, through his energy and self-sacrificing devotion to his task, developed in his community and surrounding territory a spirit of cooperation and friendly rivalry among the farmers that has been instrumental in the production of better livestock, larger yields of grain, more extensive machinery and labor-saving devices, and consequently a more prosperous and more progressive citizenship.

Often it has been a thankless task, but occasionally it has opened up wider opportunities for the secretary himself, if his ambition was so inclined, and he has gone on to manage larger and more influential district and state fairs. In this manner his talents have had greater opportunities for development, he has been able to serve a much wider field, eventually becoming one of the important factors in the upbuilding of our national life.

A good fair secretary, however, is a product of his own industry. It is his loyal ambition to obtain the best assistance and experience from experts along different lines to make his fair the best one possible. A definite program for future development is worked out on a basis of existing conditions. It is his ambition to work toward a definite plan in all future improvements. Not a building is placed, not an improvement made, or a tree planted, unless it fulfills a part of a definite plan.

He has placed his profession on a plane with that of the great educators of the day. He climbs up through strife, discord, discouragement, and sometimes actual antagonism, always carrying with him the thought of the welfare of his community. Optimism is his slogan. Through all discouragements and disappointments we find him smiling and striving to please. All honor therefore to the secretary of the agricultural fair,—his work is second to none in America's agricultural achievement.

There is just one other matter I would like to call your attention to before I close, and that is of a combination which has been worked out successfully in this state and has probably brought the greatest results of any one example in this state during the past few years. Early last spring a group of men got together in one of the towns in the middle of the state and decided they were going to have a fair in September, and this is the process of the work which was carried out along that line: They first obtained an option on a tract of land comprising 56 acres; they had plans drawn of the layout of the grounds, and also a bird's-eye view of the buildings they could place on the ground. With this as a basis, they sold something over $50,000 of stock to over 400 subscribers, giving an interest in the fair association to that many men and women in and around their county. Starting with this last season, a race-track was built, grandstand and amphitheater was constructed, stock sales pavilion was constructed, stock barn was completed and hog pavilion was built, and the grounds decorated and dressed up, and a successful fair was held in September of this year.

It seems to me that is one of the best examples of quick results; that is pushing by a group of men who knew what they were going in and getting results on a modern fair, and it is an example that is not far from Des Moines. It shows a practical demonstration of cooperation from beginning to end, and it is simply an example of getting results on a modern fair. (Applause.)

The President: The next topic for discussion will be the Forum Meeting, Increased State Aid, led by Mr. E. W. Williams of Manchester, Iowa.

Mr. President, and Brother Secretaries:

The subject that has been handed to me to open the discussion of this afternoon is increased state aid. I don't mean to take up very much of your time here. I think it is a settled fact that the men represented here know that is what we need, and taking that as a basis, the next thing is how to get at it. It is the concensus of opinion that this is the opportune time to get after it. I think all of us know our conditions of finance, and without going into them specifically I want to draw a few conclusions that you might refer to.

The fairs throughout the state of Iowa are a great asset to this state. It is a great thing, and it causes us all a burst of joy for speakers to come here and relate to us the great things that Iowa has accomplished. Not only is Iowa the greatest agricultural state in the Union, but she also has some of the largest manufacturing concerns in the country—the gypsum mills at Fort Dodge, the great sash-and-door factory at Clinton and Muscatine, the great furniture factory at Burlington, the great calendar factory at Red Oak, the great pearl button factories along the Mississippi river; and when these things are mentioned it gives us a burst of pride in the accomplishments of our great state, and I think we are worthy of all the fine things said about us. At the same time Iowa receives recognition on that point, she also stands as one of the greatest states in the

Union—I would like to say the greatest. It has one of the very best state fairs, as well as county and district fairs. We will not go into detail as to comparison between the county and state fair, only in this respect, and in what I say I intend to cast no reflection upon our wonderful state fair. This point came up at a meeting which I attended some time ago,—that while the state of Iowa had one of the greatest state fairs in the Union, there are those people living in your county and my county who will undoubtedly never visit the state fair for one reason or another, and it is up to us to make ways and means whereby they may have the privilege of seeing and having the benefit of a real county fair,—I mean the fairs which are being put on throughout the state of Iowa at the present time,—which should combine both amusement and educational features.

The point has been discussed pro and con many times whether or not we spend too much money in the amusement line, and with the idea of getting information on that subject I sent out a questionnaire to 32 fair men throughout the state asking them their conclusion. I asked this question: As a nucleus, are we spending more money for amusement features than we are for the farmer and stockman? From the replies received I gained this information: Out of the 32 fairs, something like 80 per cent spent nearly as much; two fairs spent as much by their stock show expense—and by their stock show expense I mean the expense for premiums aside from state aid, erecting pens, cost of stock judges, your straw for the stalls, cost of ribbons, tax and various kinds of blanks, and every expense you might incur in the conduct of a stock show—and I found that only about two paid as much for the stock as for the amusements. Now, the amusement features included these items: Band, free acts, races, baseball (if you have it), and I think when you arrive at your balance, if you haven't already done so, you will find that it will surprise you the amount of money it costs you to put on your stock show. It is a great thing, and the secretaries of the state who conduct these departments should receive credit for increasing the exhibition along the stock line.

Now, Iowa not only served the purpose in that line, but Iowa was the first state to go over the top in the purchase of Liberty bonds and other drives during the war. In Washington, after the men in charge of the great national drives had arrived at the point of how to get the quota, the next avenue they had to take up was how can we reach the people, giving them the correct information of what you must have and at the quickest possible moment. They started through different organizations, starting with the Chamber of Commerce of the United States, then the local chambers of commerce in the different cities, dropping down to the commercial clubs in the smaller places, and to the community clubs of the hamlet. What was their idea in doing that? In Iowa especially no avenue opened itself so clearly through which they could reach the man in the country as through the rural community clubs. You will remember that we received letters to push this good work along, and I am sure in this assertion that every fair met the expectations of the committee. That is just one avenue of what our fairs have done. It leads us up to this point, gentlemen,—can we succeed in the operation of our fairs with the little state aid received two years ago, which barely met the expenses of the fair? Today we have the chance of taking rain insurance, and it will help a great deal. On the other hand, you must take into consideration that in past years some of you, and most of us, have arrived at the peak load of admission prices—you cannot go any higher, no matter what show you can give. I think many of us have arrived at the peak of admission state aid received two years ago, which barely met the expenses of world, as well as in fairs. Next year can we give the people of my county and your county the fair that we want to give them, in view of the increased cost?

This association should offer and approve resolutions requesting and approving an increase in state aid, and in doing that we must take into consideration that each one of you men will have to take it upon your shoulders to assist the committee to help in every manner to put it logically before your people in your community, before your representatives and senators, just why you demand state aid. You must be prepared with arguments based upon certain fundamental ideas in convincing this man or that man why you require this assistance. Fair managers have had a great load in a majority of cases in making their fair pay out. If you stop to consider the matter a moment, you will readily see that that is the fact.

The first argument to advance is that you must overcome the idea that the fair does not appeal to the majority of the people. Just in a few estimates here I will nail that thought, and then I am through. There are 91 fairs, county and district, in the state of Iowa. Now, I don't, as I said before, wish to detract in the least from the state fair, and the figures I shall give you are given simply to show you that the argument that the county fairs do not reach the people is erroneous. The total attendance at the county fairs in 1919 was 1,560,643, and in 1918 it was 1,150,461, while in 1919 those that attended the state fair numbered 408,147, leaving a difference of 1,172,496 people who visited your fair and mine that were not able to get to the state fair. This is meant in no way to detract from the value or the worthiness of the state fair. It simply shows you that you are accommodating the people of the state. Lots of them cannot go to the state fair—it is impossible. The state aid in 1919 given to the county fairs aggregated $90,508.50, or $39,460.14 more than was paid to us in 1918; but through Mr. Corey's figures in the Year Book it shows there was an increased expense of $430,182 to the county fairs, due to the increased cost of different products which the fairs had to buy. The average state aid in 1919 was $973.61 to each fair. There were 21 fairs that drew $1500, the limit that year, and I believe it is greater this year. I have not seen the 1920 Year Book so I am not prepared to say. The expense of the fairs in 1919, notwithstanding the fact that we received $90,508.50, was 33 per cent higher in 1919, and I venture to say that the increased expense this year is 50 per cent higher. Now, there were 73 fairs that showed a profit and 20 fairs that showed a loss. Mr. Corey showed a little table there which indicated that if state aid was eliminated entirely, 43 fairs would have shown a loss in 1919.

I say this, I would like to see Iowa the greatest state in the Union as to fairs, and it has now one of the greatest state fairs that is known any place, and I think we are getting the name of having more and better county and district fairs than any other state in the Union. With such fairs as Sioux City, Davenport, Waterloo, Burlington and others, there is no state in the Union today that can boast of more fairs of that order, of the larger interstate fairs, than Iowa.

I have nothing more to say. It is now open for discussion here. It should be taken up wisely and discussed. We shouldn't expect this year the attendance of last. Some of you, I am sure, are talking now of reducing your admission price this year as compared with what you charged last. The entrance admission cannot come down for the reason that freight rates and express rates have not come down, so I don't see any hope of decrease in the cost of amusements and material. So I am afraid we will have to get all the money we possibly can. It is up to this worthy body to take it up, size up the situation and deal with it in a businesslike way. Is it the proper time? It is up to us to make this the greatest fair state in the Union.

I thank you. (Applause.)

The President: Are there any questions that you desire to ask of Mr. Williams? Or do you want to offer a resolution or make a motion that will guide your directors in the coming year with reference to asking for state aid? Perhaps it would be wise to have some one make a motion to get the concensus of opinion of those present, whether you want your officers to make an effort to get increased state aid.

Motion by Barber, seconded by Pike, and unanimously adopted, that the directors of the association be instructed to take steps to procure additional state aid.

The President: There has been assigned here a topic on War Tax on Admissions, and I am going to ask somebody who knows something about the tax on admissions to open that subject. You all know that the Collector of Internal Revenue came around and told us we had to pay tax on admissions to the grandstand on both afternoon and evening performances. I know of some instances where he went further and asked for a tax on the stock show and other things. Some of you have paid the tax, and others have not. I think a majority of you have not paid the tax. I think, however, this is a topic that should be discussed here and get such information as you can out of it, and possibly result in resolutions that will be forwarded to the Collector of Internal Revenue, not only in the state of Iowa, but in Washington, D. C., protesting against the application of this law, which is really a technical application of it. It is an interpretation, rather, of a law that is not explicit, or isn't as explicit as it should be. I think the resolutions committee have that under advisement now and will present such a resolution. Can we hear from somebody on that subject?

Mr. Oleson: Did you pay the revenue tax that they asked for?

The President: Some paid it and some did not. So far as I was concerned, I did not pay it.

Mr. Oleson: I don't think any of them should have paid it. We paid it down in Humboldt because he said he had the authority, but I don't think some of those collectors have as much authority as they think they have. (Laughter.)

The President: I used to be in the business myself, so I appreciate the joke. (Laughter and applause.) I was so strongly of the opinion that they were wrong that when they sent four of them to me, I told them to go off and chase themselves.

Member: How many have been called upon to pay it?

The President: I think every fair in the state has been called upon to pay a tax on their admissions to the grandstand both afternoon and evening.

Mr. Shores: The last I heard we put on a stock show every night, and for that reason we expected to get by the tax, and I think the boys did, but I know at the time that was their idea. We put something on in the way of an agricultural parade at the grandstand during the last hour, and I heard they would not bother us for the tax.

Mr. Clarke: We have a man in our town like our worthy president who is a deputy revenue collector, and we thought we were caught one night. In fact, like the gentleman from Waverly, we put on six stock parades in front of the grandstand, three afternoon and three evening, but Tuesday afternoon and evening we thought we were without the stock show, and we left the matter to him and asked him to take it up with the revenue department in Dubuque, and he reported to me the other day that he had an interview with them the other day and thought we were going to be forgotten. As near as I can find out, the office in Dubuque is going to forget the whole thing.

Mr. Failor: I was one of the suckers who paid it. I was advised by an attorney to pay it under protest, and I was also told that Mr. Corey was going to pay the stock show tax under protest and that we would likely get it back. I understood there was a penalty that might be attached, and I didn't care to pay the penalty, and we thought we would pay this tax under protest, and then later on to have this money refunded. If you fellows get by, we will probably get ours back, and I hope you get by.

Mr. Norton: We were notified about two days before the fair gates opened that we were liable for the tax to the grandstand. Now, the revenue man, brought out the book and showed me the law. Like our president, I have had some experience in the income tax department and believe me when the internal revenue man speaks there is only one interpretation to put upon the revenue man's version, and that is to comply with the law. Our instructions are, if you ever have had business with the government, or if you think that you have any personal pull, you will have to throw it aside, for that law is binding until it is reversed by higher authority. I believe in reading that law. I am not a lawyer and I don't claim to be able to interpret any law intelligently, but it is apparently mis-worded, it is not clear, but in all instances the government gets the benefit of the doubt, and I am firmly convinced that you gentlemen who have not paid the income tax will be penalized at least 50%. It cost us for our grandstand admissions alone for afternoon and evenings $1,465.68. That money has been forwarded to Louis Murphy, and I feel that we have done the right thing, have used good business judgment in forwarding it to him, because when they speak, now, gentlemen, it is final. I understand that before this law was put into effect a number of revenue men met here in Des Moines and received that interpretation. Now, they tried to tell me that some man down here, the secretary of some show man's league in Lincoln, Nebraska, had said that you didn't have to pay it, but I believe you do, and the best thing is to be square with the collector. If you have been notified and have not paid them, of course being an entirely new matter they may be lenient with you, but that is a question for this association, and my honest opinion is that it should be thoroly discussed. I do not believe that it is a just tax. It is absolutely impossible to run a fair unless you have a horse race, the two are synonymous, and in racing horses that also produces the object of having it, for the object is to produce better stock, which is the primary object of a fair, and I don't believe we should be penalized for it. I think that the average man who is not clothed with some legal knowledge can put his interpretation on a law as well as a man who has an official appointment, but the man who has an official appointment is the man we go by. The revenue department has at times reversed itself, and when the matter is taken up with the revenue department in Washington it is futile to take it up with the revenue department at Dubuque. Louis Murphy is known as one of the best revenue men in the United States, and the thing for us to do is to carry that thing on to Daniel Roper at Washington, who is the revenue commissioner, and I believe that he will give serious consideration to the appeal from an assembly like this, representing such interests as we do, and I believe that it would be proper for the resolutions committee to address him with regard to this matter.

Mr. Clark: If the question wouldn't be considered personal, I would like to know if the state fair paid this tax?

Mr. Corey: I think the state fairs of this country are just as much up in the air on this proposition of tax as the county and district fairs. We had a committee from the International Association of Fairs go to Washington last year, and they put in about a week with the Internal Revenue Department, and also with the Treasury Department, and when they came away they had no more information than when they went down there. That is, they had a lot of information, but they had no decision where we are at. We were just as much in the air when they came back as before they went down. So far as the state fair is concerned this year, just two or three days before the opening of the gates, a revenue man from Washington dropped in and told us we would be expected to pay a government tax on the afternoon and evening grandstand. He told us that the outside gate and the horse show were exempt. He said that our horse show, being a regular feature of an agricultural fair, was exempt, but he said we would be expected to pay tax on the afternoon grandstand and also the evening. We then wired Washington, and we had the attorney general wire Washington and give a brief synopsis of the program put on in front of the grandstand in the afternoon and evening, and in the evening we included a livestock parade, which was put on on three different days. The revenue department in Washington wired back that the afternoon grandstand would be exempt from tax, but we would be required to pay on the evening show. Immediately after the fair I filed a statement giving the number of admissions and the price of admissions at the evening show, and along with that statement I had the attorney general make a protest that this was a regular feature of the agricultural fair, that it had been such at the Iowa state fair for twenty years, and it was, in addition, a feature of all surroundrounding state fairs, and on that question we protested payment of the tax, and up to date we have heard no word from the department, nor have we been called upon for the tax. I think Mr. Stanbery and Mr. Bacon were both in Chicago last week and they heard the discussion that went on there, and they know what the situation is among the state fairs. We had some state fairs in the United States this year that didn't even pay a tax on their midway shows. The state fair this year paid a tax on the midway shows. That is, they collected it, and also paid a tax on the ride, but that is the only tax that we did pay.

I don't know as there is any other information I can give you on the subject. That is the way we handled it at the state fair. I might say that all of the county and district fairs wrote in, after I gave them this information, and just gave them the information I had. I didn't feel like advising them not to pay the tax, because we had been called upon to pay it, and I didn't want to advise them in any respect whatever.

Mr. Bacon: At a meeting of the district managers and officers of this association held in this hotel in October a resolution was passed objecting to this collection of this tax and with instructions to send a copy of those resolutions to Louis Murphy at Dubuque. I followed out these instructions and didn't receive any reply back in the form of a letter, but did receive a big bound copy of the laws underscored that we were bound to pay the tax on admissions afternoon and evening.

Mr. Corey: Pardon me for speaking again on this subject. I think possibly you have all read a copy of that revenue law which exempts all admissions to agricultural fairs. The way we read the law there is no question—that is, the way the novice would read the law, there is no question that the admission at your outside gates and all customary features inside of the gates are exempt from tax, but the local revenue officers are working on the interpretation put on the law by the Revenue Department, and in that interpretation they hold that it makes no difference whether it is a customary feature of the fair, or not—that is like the show in front of the grandstand at night. They say that isn't a customary feature of an agricultural fair because, they hold, that is not necessary to have that show in order to promote a livestock and agricultural exposition in the state, and that is what they base their opinion on and the way they interpret the law.

The President: Are there any others.

Mr. Failor: I want to say just this, I paid on the night show only. We had an afternoon show, of course, but we paid only on the evening performance. In preparing this resolution, I might state that Mr. Roper is no longer connected with the Department of Internal Revenue, but his successor has been named, altho I cannot recall his name now, and in preparing this resolution it should be addressed to the present incumbent in that particular office. I might also say that lots of you ought to make application for exemption on your capital stock tax, for that is within the provisions of the Internal Revenue law. There is no question about your exemption from that if you make application, and in your application state that you are not organized for pecuniary profit, that you are organized for the promotion of agriculture, etc., and you will get back an exemption from the department on that particular tax. That should be attended to, because if you do not do that there is also a penalty on that. So that those of you who are not running for profit, and I think there are not many that do—in fact, I do not know of any that ever did make much of a profit—those of you who are organized that way, make your application and get your exemption, so that they won't be bothering you for your tax on the capital stock.

The President: The next topic is on the subject of Admissions and that will be led by Mr. N. W. McBeath of Whiting, Iowa, who has charge of the admissions at the Iowa State Fair. Mr. McBeath.

N. W. McBeath, Whiting, Iowa:

ADMISSIONS.

When I received notice from Mr. Bacon that I was to appear before this convention on a discussion of "Admission," I hesitated some time about doing so. Having been connected with the Department at the Iowa State Fair a number of years I realize the possibilities of discussion along this line.

There is, at this time, a gentleman in this convention with whom I have been discussing a point for something like four years. He may think he has won the debate but I am not through with him yet and hope to continue the discussion before leaving the City if I can get him cornered long enough to get the argument started. If I can only get him started I know he will give me plenty of his time.

Now, Mr. President, I am going to open the discussion with a very few words, but I am going to leave it up to you if it gets too warm. If Mr. Moore or Mr. Bechner would like to have their time occupied this afternoon I am sure I can see to that very easily.

Really, gentlemen, I hardly feel in a position to discuss this subject with you as probably some of the other men might be able to do. My experience in this line has been with the I. S. F. and the questions that confront such a fair probably would not be of so much importance to you in your county fair work. However, I will endeavor to outline for you something along the line of the system that has proven very satisfactory in our work, and you may find something that will be of value to you.

There is no doubt that a great deal of responsibility is placed in the hands of your admission department. I feel that there are two things necessary in making this department a success. First, and the most important, is the selection of your men. You men in your County fair work probably do not find this such a difficult matter as you do not need many men and in most cases you are personally acquainted with them. This is not the case in selecting some 125 men as Mr. Sheldon has to do each Fall. Men come to him from all parts of the State and in many cases, while they are well recommended to him, they do not always prove satisfactory.

May I, at this time, just speak a few words to you men who recommend a good many men to Mr. Sheldon each year. Do not recommend anyone to him that you do not know is a good live wire, willing to work and able to do a good hard day's work. You must realize that we handle between three and four hundred thousand people in a very short time and to do this means a very strenuous week for the men in his department.

Each year we find we have on our hands a few men who are too old to be good and active on their feet and in many cases walking with the assistance of a cane. Send good strong men and he will put the cane in their hand before the week is over. You will also find the older men are unable to see as well as the younger men and this is a great hindrance to a good gate man.

I will never forget my first day on a turn style. Mr. Legoe, who is still one of the Directors of the I. S. F., was at that time Superintendent of admission. I remember a little talk he made to his men before we were sent out to our different gates. The one thing that always stayed with me was—"Boys, read your tickets and know what you are taking. I want you boys to keep your eyes open and if possible look clear through a ticket and see what is on the other side." This you will find is not always true with the older men. We also found some trouble in taking care of the boys. While this is not so difficult, do not send boys that are too young. We find the boys under eighteen or twenty are not quite so good as the ones that are a little older. If you men will just remember these things when you make your recommendations you will be doing a great favor to the man who will have this department next year.

In selecting your men for your admissions department, select only those who you know are honest and willing to work for the good of your fair. You will always find a number of men looking for a job around the fair ground who care little or nothing about the outcome or success of your fair. Such men just want a job doing something to help make a few dollars to have a good time, and are no good to you and will in no way help build up your fair. The future of all your fairs depends largely on the men in charge of it and if you select men who care nothing about the future, you will soon find your fair on the decline. While your men on your gates do not figure so much in the good management of your fair, you will find that every good man you can use who is a good booster and anxious to see you do well means much to the success and outcome of your fair.

We have men over the State that are so enthusiastic over the I. S. F. that they spend weeks of time boosting and talking for the fair and this all has its effect when you have a number of such men over the state doing the same thing. I could name a number of towns where a few years ago no one ever thought of attending the I. S. F., but now through the efforts of some good man who became enthusiastic through working in the admissions department a few years and has talked and boosted you will find several families coming from his home town and camping in the grounds and making a week of it.

One of the greatest faults you can find in a man is one who is too quick to show his authority and argue with your patrons. He should always be pleasant and willing to give your people any information possible and have them go away feeling that you were glad to have them come and not that all you wanted was the 50c they spent to get in.

One of the best men that ever worked in the Department at Des Moines, as far as being honest and willing to work any time, was just such a man and caused us so much trouble that it was necessary for us to get rid of him. He was always in an argument with someone and in many cases left people sore, and many times they would make a report to the office and cause some very embarrasing explaining to make them feel right again.

After your men have been selected, the next thing of importance is in your co-operation. I feel that the success of this department at the I. S. F. has been in the co-operation of the men and the system used for handling them. It would be impossible for two or three men in the office to look after some 125 men and have a very successful department. We have, however, divided our work among a number of our best men and thrown a great deal of the responsibility upon them. Each entrance into the fair grounds—the amphitheater entrance and the amphitheater proper —is turned over to a good reliable man, who is known as the captain and he is responsible for the handling of the entrance during the fair. Each captain is then assigned such men as are needed to properly handle this gate. He is not only responsible for the gate, but must look after the men in his charge, keep their time and hand in a report at the end of the fair as to their conduct and ability. This record has proven of great value in selecting the men for the coming fairs. Mr. Sheldon can take his records and tell you just what kind of a man you have been sending the department for the last fifteen years. The captains should be well informed men and know exactly what your tickets mean and able to handle men. He not only looks after the men, but it is up to him to settle any dispute that may arise at the gate.

Any new orders that may be put out by your Board are then handed to your captains and they in turn inform their men, thus saving much time in getting the order to each man individually. You will find a great deal of difference in the number of men different captains will ask for to do the same amount of work. Some of them will do the same work with two or three less men and probably not work his men as long hours as the one with more men. It is hard to get them to use their men to the best advantage and have them where he wants them during the rush and relieve most of them during the dull part of the day. Many times you will find all of his men on duty and nothing doing at all and again find him with part of them off duty during the busy part of the day.

Probably the greatest problem facing all of your fairs today is the handling of your autos. This, however, is a question that must be handled differently according to the conditions existing at your different fairs. While this causes a great deal of extra work for your admissions department, I think the real difficulty comes not so much in the taking of the tickets as it does in getting them sold to the people in your cars. While the admissions department usually gets its share of the blame for the congestion at your gates, the real trouble is usually getting your tickets sold. I think you will find in most cases your men on the gates can take your tickets a great deal faster than your sellers can sell them.

I am not saying this in a way to criticize that department, for I fully realize just what they are up against in trying to get them sold to the cars as fast as they will come on your busy days. Get your tickets sold and I am sure your men on the gates will get them.

The next great problem, I think you have found, is in the handling of your pass gates. This being the case, it has been found advisable at the State Fair to make a separate department of the pass gate men. You might be surprised to know that out of the 125 men used at the State fair, at all outside gates and amphitheater—25 of them are used in this department. I do not mean to say that one-fifth of the people are getting in on passes, but every entrance must have a pass gate which must be kept open all of the time.

We have with us today, Mr. C. N. Whiting, who has had charge of this department for a number of years. Most of you are acquainted with him or will be before he gets out of the City and I am sure he would be glad to give you any information along this line. He has given this much study and might have something worth while for you.

This department is made up of the best men we can find, every effort has been made to get the good ones back each year. When a good pass gate man is found it makes the work much easier if you can get them back year after year. Any good bright man can do good work at your general admission gate, when he has but one kind of a ticket to look for, but when it comes to knowing all your different tickets, which at the I. S. F. number about forty, it requires a man that is willing to give them a great deal of study.

One of the features which I believe you will find advisable in this department is the changing of your men in this department from one gate to the other. These men are not under the captains at the outside gates and must report to Mr. Whiting before they know where they are to work. This does away with some of the possibility of telling a friend to come to a certain gate and he will see that he gets by.

I do not know just what can be said that will be of interest to you in the handling of your amphitheater, as with the auto, conditions at your different fairs will enter into this question very largely. The only suggestion I would make, would be to avoid the sorting of your crowd as much as possible in getting your crowds through your gates. Much confusion was caused this year at Des Moines because we had a pass gate. ticket gate, and cash turnstile. It is hard to get your crowd to understand that the cash ticket is not a pass and it was almost impossible to keep the people with the coins sorted from the ones that carried the tickets.

In summing up the Department as a whole, the things that are necessary for a successful department are the selecting of your men and some good system in handling them that you are sure you have them where you want them at all times. Instruct them well as to what your tickets mean and send them out with this one rule in mind. Everyone that passes through the gates must have a ticket. This was the one rule always used by Mr. Olson, who so successfully handled this department until his death. Avoid, as much as possible, having people running back and forth through your gates and showing no tickets; they may be all right but it looks bad for your men in charge. In this matter I would not except your Directors e ther. They make your rules to go by and should be the last ones to try to break them. I know they are all busy men and have a great deal to look after, but if they have so much business waiting for them on the inside that they haven't time to stop and show a pass, they should be on the inside looking after it.

There is just one more thing I would like to speak of before I turn this subject over for discussion and that is the matter of having men on your gates from the time your fair opens until it closes. It has always been the custom at the I. S. F. to never take the men off the gates. If you have anything worth while going on at night you should make a charge for going in. On the other hand, if there is nothing doing, you do not want them on the grounds without. You will get plenty of the rough element on your grounds without throwing your gates open and you should give your exhibitors this protection in doing your best to protect them. By keeping your men on duty all night you will have him there for the early bird in the morning. I have, on a few occasions, attended County fairs and found no one on the gates as late as eight o'clock in the morning. Now you will find that a great many people will pass through your gates early in the morning who have passes that you should get or should pay to get in. Be on the job all the time and get everything for your fair that is possible.

Now I have gone over the subject very hurriedly and tried to give you an idea of the system that has proven very satisfactory, but one which we realize is not perfect. There may be some one in the convention here who has some good ideas that will be of benefit to all of us and we will be glad to have them give them to us at this time. I have not gone into the details very much and if any of you would like to ask any questions I will be very glad to answer them if possible.

Mr. Bacon: I would like to ask you how you handle the automobile gates. That is the ticket sellers outside of the gates, and the matter of tax.

Mr. McBeath: We don't handle the tickets at the automobile gates, they are handled by the treasury department. That is done almost entirely thru the men selling the tickets at the gates. We try to get to the people in the cars before they get out of their cars and thus avoid men getting out of their cars and congesting the gate.

The President: If there are no more questions, the next topic will be taken up, which is "Concessions," led by Mr. Don V. Moore, who is the worthy successor of our old friend Joe Morton. Mr. Moore.

Don V. Moore, secretary, Interstate Fair Association, Sioux City, Iowa:

Mr. President, Gentlemen:

It is a pretty big job for a man who has just moved into your state to be asked to speak on this subject. I did not solicit the place on your program, and when I consented to talk on this subject I was distinctly informed not to write a paper. I wish to thank the officials of the association for this opportunity of speaking to you men today.

My first name is Don, and I hope to be one of you as long as they continue paying me a decent salary.

Concessions is a hard proposition to talk about. I will make one or two general assertions and then if you have any questions to ask, and I can give you any help, I will do so. I have always considered that any fair man, secretary or manager, who would have a coot show on his grounds, or a fortune-telling show, a mighty poor fair manager—awfully poor. One year I had five coot shows on my own grounds. (Laughter.) I have always had fortune tellers, and I expect to continue having them.

Last year I came back to South Dakota to visit the South Dakota State Fair. There was a party of us, consisting of my sister and her husband, and another couple from South Dakota, and we were walking along the streets seeing the sights when a fellow tried to sell my sister a piece of chewing tobacco, and I thought that was the limit, and that no decent fair manager would permit such pests on the grounds. (Laughter.) When I came to Sioux City to take charge of the fair, the first thing I saw when I visited the grounds was a building all plastered over with Climax Plug tobacco signs, and I said, "What's that?" and they said that was their building. I said, "Does he stay there?" And they answered "No, he has five or six men walking around the grounds soliciting sales." And that was the end of another pet aversion! I said I would never have a walking chewing tobacco man on the grounds, and there he was already there. (Laughter.)

The other night I was out in Sioux City with a bunch of friends. We had been having a lot of trouble keeping gypsies off the ground, which we did, and at this little social gathering the other night I made the statement that next year I was going to make them keep fortunte tellers off the ground. I had no sooner said that than four or five ladies got up and started to holler like the deuce. One lady said, "Why, that's what we go to the fair for, we have more fun making up parties to get our fortunes told than anything else connected with the fair," and I looked at the lady a little bit and I didn't dare to answer her, because the lady was my wife. (Laughter.)

And as a result of all my experience in this business, my only advice is, and my only proposition is, for you to put on your grounds whatever you can get some money out of, and still get by with your people and the law. That is about all all of us do, and I expect what all of us will continue to do for a long time.

We put the concession on the ground to make money, and I think it is the greatest mistake in the world for any fair organization to look at their last year's receipts and then tell the concession men to go out and beat it. I told my concession man this year to do that, and he did. (Laughter.) So you see how much I know about concessions. (Laughter.)

We got something like $7,000 more this year than last, and we jipped them good and proper. We jipped them so badly this year that next year we expect to have $7,000 less in that department. (Laughter.) We didn't figure as far ahead as next year, and a lot of them went away broke—mostly our own people, and we didn't cry much.

I can't tell you a thing about concessions, boys, because Mr. McLaughlin, who has been in the fair business quite a long time, is in charge of that department of our fair, and he said to me the other day, "Don, I have been in this business fifteen years, and I know less each year than I did the year before." (Laughter.) And that is my condition. My advice is to put on just as many concessions as you can, run them as clean as you can, and don't do anything that the law can get you for.

A number of years ago a grandstand concessioner sued us for $500 for putting too many people in the grandstand, making it impossible for his venders to go thru the stands, and he wanted $500 damages. The case went into the circuit court and we beat him, and he appealed to the supreme court, and the big bolshevik justice of the North Dakota supreme court, Associate Justice Robinson, decided the case against us because he had signed a contract in which nothing was said about counting aisles, and such stuff as that. This man claimed there was a verbal argeement that I wouldn't stand anybody in the grandstand, but it was automobile day and we had to put the people there or lose the money. After that defeat I went to three of the best lawyers in North Dakota to have them make up a contract, and it is not a contract at all, it is a license for them to do business on our grounds. It is the best proposition I have ever seen. I am going to read you the last clause of this agreement, and then if any of you folks want a copy of it for your own proposition, you are welcome to them, and you have our permission to adopt it in whole or in part.

Here is Clause No. 10:

"The Licensee assumes all risks of damage or loss either to person or property from all and every cause, including fire, the elements, violation of law or negligence either on the part of the Licensor, it servants, agents or employes or any other person; it being the understanding and agreement between the parties hereto that the Licensor incurs no liability or obligation to the Licensee other than to permit him the use of the grounds or space described herein."

That is air-tight all the way thru. There are ten clauses in it, and nobody can ever sue you on that, because he signs it and you sign it, and you get his money.

Does anybody want to ask any question?

Member: Do the fellows that sign that, read it?

Mr. Moore: They don't read it until after they sign it. (Laughter.)

Member: There is one thing that you left out of it, and that is that you can shoot him if he doesn't pay up promptly. (Laughter.)

Mr. Moore: Don't do anything that the law will get you for. If you collect $50 from him for concessions and throw him off the first day, you keep all the money if you can, but you must remember that the law says you cannot confiscate a man's property or money without due process of law. But if you don't put that clause in, that you can keep this man's money, get his money anyhow if you can. (Laughter.)

There is another feature on the fair grounds that is hard to take care of, and that is the sheet writer for the farm journals. If you folks have any of those fellows, kill them! ! ! (Laughter.) Up in North Dakota at the Grand Forks fair we never had a farm writer on the ground. We didn't have a sheet writer or newspaper subscription agent on the grounds in seven years, and that is an accomplishment of which I am very proud. I came to Sioux City and thought maybe it would be the same there, but we had 108 of them on the grounds the first day. The next day we threw three of them in the coop, the next day we put 18 in jail, and when the fourth day rolled around we had only four of them under a tent. I believe they were all farm newspaper subscription agents. I don't know if you do it that way in this state, or not, but that's my method of handling them. I have got that to contend with, but I think we can gradually work it out so that that thing will be overcome. I would like to see this association adopt a resolution against that practice, and also the coot shows and fortune tellers. (Applause.)

Following is the license which Mr. Moore referred to:

GRAND FORKS COUNTY AGRICULTURAL SOCIETY

Concession Department

No.. .... Grand Forks, N. D., ..., 192...

THIS AGREEMENT WITNESSETH:

That the Grand Forks County Agricultural Society, Licensor, hereby permits ...., Licensee, to use space as follows........

(Concessioner)

....

....

exclusively for ....

during .... for which Licensee agrees to pay $.......... on demand.

Receipt of $.......... is hereby acknowledged.

It is mutually agreed that this license is subject to and controlled by the terms, conditions and stipulations printed on the back hereof.

GRAND FORKS COUNTY AGRICULTURAL SOCIETY.

.... Licensor.

Licensee.

Tickets Issued, Nos.

....

....

By...

Supt. of Concessions.

On the reverse side appears the following:

1. Any representative of said Licensor shall have access to the premises at all times, and all buildings, tents or enclosures, constructed or used under the terms of this agreement must have the approval of the Licensor.

2. Licensee shall conduct his business in accordance with the laws of the State of North Dakota, and in a manner satisfactory to the Licensor.

3. That the said Licensee shall cause to be posted in a conspicuous manner at the front or entrance to said place of business a sign showing the price to be charged for meals, lunches, drinks, or other articles of food to be sold, the size of said sign, manner and place of posting to be approved by the Superintendent of Concessions.

4. That the said Licensee shall cause to be posted in a conspicuous place at the front or entrance of said place of business, a sign showing the number or letter designation of his or her concession; the size and character of said sign, manner and place of posting, to be approved by the Superintendent of Concessions.

5. Said Licensee shall not transfer, sell, assign, exchange or barter, or permit his employes to sell, transfer, assign, exchange or barter, any privileges, tickets of admission or rights issued to Licensee or his employes hereunder.

6. The violation of any of the terms, conditions, or provisions hereof, shall at the election of the Licensor or its Superintendent of Concessions cause the whole amount of this contract to become due and work a revocation and forfeiture of all rights and privileges herein granted to said Licensee, and in the event of such breach and such election of said Licensor or its Superintendent of Concessions, any and all sums paid or contracted to be paid under this contract to said Licensor shall be and become the property of the said Licensor as liquidated damages for said breach.

7. Weather conditions shall not in any manner affect this license, and the Licensor does not in any manner guarantee or assure the Licensee that the sidewalks, paths, streets or avenues on its grounds or the aisles and passageways in its buildings, stands or enclosures, will be kept free from obstruction caused by persons crowding, loitering, standing or sitting therein, causing passage thru or over the same difficult or impracticable, and such crowding or blocking of said sidewalks, paths, streets, avenues, aisles or passageways shall in no manner or way affect the terms, conditions or provisions of this agreement.

8. At the expiration of this contract, said premises shall be surrendered to the Licensor without further notice to quit, and in as good repair as when possession was taken, unavoidable damage by fire caused without the fault of the Licensee, excepted.

9. Licensor shall have a lien upon all property being kept, used or situated upon said premises or upon said fair grounds, whether such property be exempt or not, for the rent or privilege money to be paid under this contract and for any damages sustained by any breach thereof; and that the Licensor shall have the right to restrain the same without process of law, and appropriate said property to the use of the Licensor to satisfy all of its claims against said Licensee.

10. The Licensee assumes all risks of damage or loss either to person or property from all and every cause including fire, the elements, violation of law or negligence either on the part of the Licensor, its servants, agents or employes, or any other person; it being the understanding and agreement between the parties hereto that the Licensor incurs no liability or obligation to the Licensee other than to permit him the use of the grounds or space described herein.

The President: The next topic for discussion is Amusement and Entertainment, led by J. C. Beckner of Clarinda, Iowa.

Mr. President, and Gentlemen of the Fair Managers' Association:

It is a pretty hard proposition to tackle the subject of Amusements when you have so many good county fairs as we have in the state of Iowa. I was talking to the president of Parsons College at Fairfield the other day when he was in my place of business, and our conversation drifted about to how he felt when he got up to talk, as much as he addressed people. He said he always felt as though he needed a forked stick to keep his legs from knocking together, and I would like to have that forked stick right now myself.

Amusements and Attractions, that is one of the big features in the fair game. Now, down at Clarinda we have had for the last few years what is known as spectacular stuff, with fireworks and acts, and we have made considerable money out of that kind of attractions, and it seems to me that is one of the greatest things that any county fair can put on.

Now, we have two county fairs in our county—one at Shenandoah and one at Clarinda. Of course, we in Clarinda think we have the best fair! (Laughter.) And I believe Mr. Woodford will concede that any cow that won't lick her own calf isn't much of a cow.

Now, we have had baseball with acts several years ago, and we had Cap Anson, whom you all know is one of the greatest captains that the Chicago White Stockings ever had. We paid him $100 to come out and umpire these games. It was a drawing card, and we played that for a long time until we got on our feet, and then the fireworks bobbed up and we took that stuff on, and that is the best stuff we have ever gotten hold of. The night attractions, gentlemen, I believe is the double-play at the game. You cannot figure how many people come in at the gate and figure to stay for the night attractions, and they are going to stay, that's all there is to it, but in the first place you have got to entertain them and bring them back.

And that all means, what are you going to have next year? That is the big game—what are you going to have? The same old thing? Some of you fellows in your home town say, "I wouldn't have advised that," but you don't know how hard it is to get something new and novel every year. Now, we have played Lincoln Beachy. He got killed out on the coast several years ago, and Clarinda had him contracted. He was a stockholder in the Clarinda Fair Association at that time. We made one year $5,000 out of Lincoln Beachy, which you will admit is paying a pretty good revenue. Then came along Art Smith, whom a great many of you know. He was as good a dare-devil in his day as any man that we have ever had, and we made money out of Art Smith, and we had Art contracted for the next year and he went some place and got two or three legs broken; and then we got one by the name of Gertson, who is about as big a dare-devil as we have ever had. And that is where we quit the flying game, although that is one of the biggest things you can put on to draw the crowd both day and night. You have got to have the acts along with that to work in with the horse racing, and we must admit that horse racing is one of the big acts if you want to run a fair. You can run it as square as you can and yet you will have them changing money in the quarter-stretch—you will surely have them changing money a little bit.

Next year is going to be a year that may be a little hard, we cannot tell; it depends upon what the land is going to do, whether it is going to come down or stand still; but the main thing is to plan good stuff and pay the price for it, and charge the people for it, and they will thank you.

That is all I have to say, gentlemen. Thank you! (Applause.)

The President: The next topic is Publicity, led by Ray P. Speer, who is publicity manager of the Minnesota State Fair, and also manager of the Cooperative Publicity Bureau. Mr. Speer.

Ray P. Speer, Publicity Manager Minnesota State Fair.

Gentlemen:

The meeting is drawing to a close, and I am not going to bore you very long. I am going to make about three points and quit. In the first place, I think it can be taken as an axiomatic principle that everybody believes in publicity. I don't think it is necessary to stand up in front of a fair managers' meeting and try to prove that publicity is a good thing. I don't think there is anybody who will contradict it. The big question is, How are you going to get your publicity? and What kind of publicity are you going to use? In the first place, I think that a great deal can be said as to how you are going to get your publicity. When we start getting away from the point that publicity is good, then the average fair man commences to get into trouble. Now, in the first place, I am absolutely convinced that practically every fair in existence does not organize properly to get its publicity. The difficulty is that fundamentally the fair man's conception of publicity is entirely different from what it ought to be. The average successful business concern realizes that there are two branches of the business, one just as influential and one just as worthwhile as the other. He realizes that there is a production or a manufacturing end to his business, and in the second place he realizes that there is a salesmanship end to his business. Practically every fair in the country believes, as far as practice is concerned, that there is only one branch of the business—that is the production end. The average successful business concern has a man, a president and business manager, or whatever you may term him or call him, at the head of the concern, whose duty it is to run the business. Generally he is the big stockholder in the concern; he is the man who owns most of the business; he controls the business and runs it. Now, as I said before, there are two branches of organization—one of them is the manufacturing or production end, and the other is the sales end. Now, the president doesn't give any greater, or attach any greater, importance to the one than he does to the other. As a matter of fact, after his business becomes standardized and his problems of production become settled, the big end is not his production end but his sales end. That is the thing that bothers him more than his production end. The production end, although that is his biggest problem at the early part of his business, later becomes the lesser, because they come to know just what to manufacture and how to manufacture it the most economically, and very few problems come up with the manufacture of that product which require his attention, but the big end is to extend the business and sell his product to the people, so that the manufacturing end can grow up and develop and money can be made for the concern.

The average fair is nothing other than a manufactory; it is nothing other than a factory. It is managed by a board of directors who are concerned primarily with the putting on of a fair. Very few of them have had any intimate knowledge of advertising or manufacturing. This is no reflection against the board of directors that has had no experience in that; it is simply comparable to the man who has grown up through the manufacturing end of the business. And so perhaps the fair man has first made his appearance as a gate man or an assistant in the horse show, or has been put on as an assistant in the vegetable show, and then has gradually promoted himself from one position to another until he has become an officer or a member of the board of directors. He is not expected to know a great deal about publicity, any more than you could expect the sales manager of a big business concern to know a great deal about the manufacturing end of his business. I merely make this point to emphasize to you the fact that the average fair today is not based upon the fundamental principles upon which successful business is based throughout the country, namely, that there must be two branches of the business—one must be the production end and the other must be the sales end,—one just as important as the other, but neither of them to be sacrificed for the other.

Now, having established that as a fact, the next question is, How are you going to run the sales end of your business? There is only one way to run the sales end of your business, as well as the sales end of any other business, and that is, first, to do something which very few fairs do, that is to place it on a budget basis. That is the first thing that has got to be done. There isn't any such thing as going into a publicity campaign, I don't care whether it is for a fair or a shoe factory, or whether it is making biscuits, or whatever it is, of going in and spending money here and there, and money here and money there, without knowing how much money is going to be spent or what it is going to be spent for. A successful business concern doesn't spend its money that way, and by careful attention it can estimate very closely the volume of business which should come from that expenditure. The average fair can, over an average period of years, tell about the average attendance that it is going to get. It can estimate about the average receipts that the fair is going to get, and after you have averaged that, then it is up to you to operate the sales end of your business on a budget basis, which means you have got to decide among yourselves how much money you are going to spend for publicity and advertising before you ever spend one dollar for it, and if you don't do that you aren't going to get along successfully, and you will never know where you are going to be at unless you are lucky all the way through.

Now, after you have decided among yourselves that you ought to have a budget, the next question is, How are you going to determine the amount of money that you are going to spend for advertising on a budget basis? On that question there may be a great difference of opinion, even among men and women who are expert and efficient in fair work. Some advise spending a great deal more money for publicity and advertising than others do. Other fairs do not believe in spending very much of anything, believing that they can get a great deal of their publicity for nothing, but I am going to tell you one thing, that with all of the agitation that has been conducted throughout the country for years by people who are in the business of selling advertising and publicity, it is becoming increasingly difficult year after year to get your advertising and publicity for nothing. You have got to become convinced of the fact that you have got to begin to spend more and more money for your advertising and publicity merely because there is a campaign being continually conducted throughout the country against what is called free publicity. I believe myself that a fair is a public institution. Most of them are educational institutions. Most of them are doing a great deal of good in the community, and there is more reason and more license for asking for free publicity than with most of the institutions that do, and yet, on the other hand, there is a limit even to the amount of free publicity that a fair can expect to get.

Now, the question immediately arises, How much money are you going to spend for publicity? There is only one way to estimate it, and that is to estimate it on a percentage basis. There isn't any other way to estimate it. Now, some persons may say, "We will spend 5 per cent of our total receipts—of our anticipated total receipts" or "We will spend 10 per cent, or 15 per cent, or 20 per cent, or we will spend what we will." As a matter of fact, I cannot conceive, myself—I am just using the average instance—I cannot conceive, myself, how any fair can make much of a success of their fair from an advertising viewpoint if they do not spend at least 10 per cent of their average receipts. I know there are fairs all over the country, and there are fairs here, if you were to figure out you would not be spending two or three per cent, or four or five per cent, of your receipts; but I cannot see, myself, how we can get the results unless you spend at least eight or ten per cent of your average receipts. Of course, there is a limit to the amount of money you can spend for publicity. I believe I spoke before a meeting of the Iowa Fair Managers here this spring, and I quoted this instance, and I am going to leave it with you, only I have got one more year to add to it.

I have been in direct charge of the advertising department of the Minnesota State Fair for the past seven years. We used to spend for the Minnesota State Fair from $15,000 to $20,000 for advertising and publicity. It hovered around that point for a number of years, and we never seemed to get anywhere. Now, that is a great deal of money, and at that time it amounted to round about 10 or 12 per cent of the total receipts. I am speaking in broad figures now. Some of the members of the board felt that we should increase our advertising budget. One of the members was a manufacturer of shoes from St. Paul, a very successful business man, and he has made his business successful largely because he was always liberal with his advertising. We have a paper manufacturer from

Minneapolis on the board, and he felt just the same. They talked things over and said "Let's shoot a little more into the advertising pot this year and see where we get with it." Mr. Simpson was in charge of the fair at that time, and finally they decided to appropriate $23,500. I will always remember the time they appropriated it. There was a great deal of discussion about it, but it was finally allowed. I don't know whether the advertising had anything to do with it, or not, whether it was the fact that they were spending more money, or something else, but as a matter of fact the fair was more successful that year and we made around $30,000. The next year when the board met I was out of the city, and on my return I learned that they had established a budget of $26,500. They raised the ante $3,000, and we spent it as judiciously as possible, and that year we made about $60,000. The next year, which was a year ago, I was placed in a peculiar position, of fighting against the board, fighting the board on an increased advertising budget. They wanted to place the budget at $30,000, and I told them "Gentlemen, there is going to be a limit on this matter of advertising, in my opinion, and I am going to serve notice on you right now that you cannot continually raise the advertising budget and still get results." I was passing the buck right back to them, and they took the responsibility. They said "We are spending the money; you get results," and last year we made 160-thousand-some dollars. I am not saying that the advertising had any more to do with the increased profit than any other phase of the management of the business, but the profit was there. I am not saying as to that, but I am just giving you the facts. This last year our advertising budget was placed at $35,000, and as a matter of fact through increases sanctioned by the board later in the season we spent $38,500 for publicity, and our total net profit for the year, according to the audit report, was $211,000.

I am merely giving you those facts. I am giving them to you because I want you to know why I am sold on the value of publicity. And here is the peculiar part—the more money we put into advertising, the smaller was the percentage of the total receipts spent for advertising. We were spending approximately 12% of the receipts and getting nowhere, and we practically doubled it in five years and we are spending between six and seven per cent of our total receipts. I am merely giving you those figures because, first, I want you to get the viewpoint, and, in the second place, I want you to get my viewpoint as to why I believe so enthusiastically in the value of publicity.

Now, after having established the budget, you can spend as much as you want, that is for your board of directors to decide. The next is, How are you going to spend it? I was much inclined to spend my money for almost anything that happened to appeal to me at the moment. As year after year passed by and I became more and more familiar with the results that were being gotten from advertising, I have become more and more convinced of this fact, and I give it to you for what it is worth, that the average fair publicity campaign is not simple enough and it does not deal with few enough kinds of publicity. The trouble with the average fair is, as far as its attitude toward publicity is concerned, that it considers too much the novelty end of publicity. I am not arguing—I do not mean this as an argument against novelties entirely—we never use novelties. I mean this, that you do not look at advertising enough in a safe and sane way. The simpler your advertising campaign is, the more concentrated it is, the less forms of publicity that you deal with, and the more money you spend on the fundamental forms of publicity, the better results you are going to get, and it is going to be easier to supervise.

At the Minnesota state fair we use only two kinds of publicity. One is newspaper publicity, and the other is poster publicity. Poster publicity is used in just its simple forms. Cards, half-sheets, one-sheets, and billboard publicity. And in the newspapers we use paid advertising space and the free advertising space. Outside of that, I would say there isn't $500 of the $38,500 that was spent last year, outside of the amount that was spent for labor, which was spent for any other form of publicity. It is easier to manage, and it is so simple. You have just two things to think about, and the less things you have to think about the more easy it is to understand and the better results you can get. That is another point.

Now, there is one other thing I want to speak about and then I am going to quit, and that is this: I am more convinced now than I ever have been that there is only one method of distributing your publicity, and that is what is commonly called the zone system. When I first took charge of the advertising department of the Minnesota state fair the fair was employing what I now call the broad-sea method. They just took their appropriation and blew it, and wherever it happened to strike it was supposed to do the work. There was a sort of false pride attached to it, the thought that the Minnesota state fair was not a state fair at all, but an exposition, an international exposition, and they spent their money as far north as Winnepeg, as far west as Montana, they plastered North and South Dakota with posters and came clear down here into the Iowa territory, east into Wisconsin, and when they had spent their money thusly where was the money that was to be spent at home?

Now I am going to give you a fundamental principle. Your old home town is Zone 1; outside of that is another zone—we will say go out 15 or twenty miles, that is, in the instance of a state fair, but with a county fair we will go out for ten miles, say, and call that Zone 2, and ten more miles is Zone 3, and another ten miles Zone 4, and when you get as far as you believe your people are interested, you are going to stop, most of you. What do you want at the fair? You want people to go through the gates at the fair. Therefore work hardest on those that you can impell to go to the fair with the expenditure of the least effort on your own part. When Barnum & Bailey shows reach the old home town, who do they try to get to go to the circus? The people in the old home town. Why? Because they have only to take an hour to go out and come back, and practically the only expense they are put to is just merely the admission ticket to the circus plus any street car fare they have to expend, and the whole thing requires only a half day off. Now, when you go out into the country into your first zone, they have to take a whole day off.

There is some expense attached to going and getting back home. It is harder to convince the man or woman or child who lives in that zone to go than it is the man or woman or child in your own back yard. Therefore use the concentrated method of spending more money in your own back yard, get persons to go from your own home town. As a matter of fact, you have got to convince the man in your own home town to just as great an extent as the fellow who lives outside of your own home town. That is the fundamental principle that is followed by the circus, by the motion picture theatre, and by the legitimate theatre, and by all forms of legitimate entertainment when they are going out after the money, so concentrate, and as you go out spend less and less as you go out. If you have arterial lines leading into your towns, go out along them, because it is easier for the folks to come in. Spend more money in the accessible parts of your territory then on the inaccessible. For instance, Minneapolis and St. Paul, some people will say, "Oh well, these people are right here, they will come." Here is Minneapolis and St. Paul with practically a million people within thirty miles reach of the Minnesota state fair, a wonderful gold mine unexploited, left absolutely alone, but we will shoot way over here $20 worth of advertising trying to get some one to come in three or four hundred miles, and lose the chance to get twenty times as many in your own home town. And the fact that concentrated publicity pays is demonstrated by our city day's attendance. Four years ago the record daily attendance at the Minnesota state fair was 101,000 people, obtained on Labor Day. After we started the concentrated method of publicity it then went up to 115,000 two years ago, and a year ago it went up to 187,000 on one day, and this last year we had just practically as many as we had a year ago—we had 170,000 plus official attendance. There are no alibis to be said on that, but as a matter of fact we had on the Minnesota state fair grounds, although our official attendance will not show it, to exceed 200,000 people on last Labor Day. It was estimated that 10,000 people got in through the north gates and fence when they broke them down to get in, and we had an attendance of 15,000 children coming through the gates without being counted. But there were so many people coming in, and because the kids were free, they didn't count them.

Now, so much for the zone method. And now there is one more point and I am through. You are going to find this tendency—at the meeting in Chicago of the International Association of Fairs and Expositions this last week I had an occasion to talk to some fair managers about it, and you are going to find this to be true—every fair manager assumes and admits it is going to be harder to get people through the gates in 1921 than for several years past, and, seriously, you are going to have to spend more money in 1921 for publicity than you ever dreamed of spending in 1920. I know of three state fairs that have recommended an increase of 50% in the advertising budget for 1921. Two of those men are very conservative, but they admit that it will be very difficult to get the people through the gates in 1921, and they have got to spend money to do it.

And with these things in mind, I wanted to make a few points in as simple a way as I could for your enlightenment.

If you have any questions to ask, I will be very glad to answer them. (Applause.)

The President: Gentlemen, the next topic is the one that they have assigned to me. I have prepared a paper, but it is getting so late I don't believe you will want to listen to it.

Voice: Go on and read it.

The President: Well, if you insist I will run through it hurriedly.

Fellow Members Iowa Fair Managers Association:

In being assigned the topic "Change in Law Demanding Printing of List of Awards," I have accepted same cognizant of the fact that there appears to be a variance of opinion of the members of this Association regarding this law, and that my views therefore will not agree with all members present, however, since this topic will be up for discussion pro and con, and since every member of this Association has the privilege of expressing his views regarding this matter, the negative will have the same consideration as the affirmative, and I trust what I will have to say will not be considered in any way arbitrary, but for the best interests of us all, in trying to bring about the very best results.

It will be my endeavor in presenting this subject to deal briefly and to the point, using the facts and figures as they exist.

In the first place I think every member here is familiar with the law as it now exists, which requires each and every fair in Iowa, to publish a financial statement and list of awards, before they are entitled to State Aid. This law was framed by our last legislature, and is practically the same law as has existed for the past ten years, but which law was not strictly adhered to prior to our receiving increased State Aid, in 1919, so that we are now receiving as a maximum aid $1,500 annually.

There has been some complaint by some of the Fair Secretaries that this law works a hardship on their Associations, and results in a needless expense to the Fairs of Iowa, and that the law should be amended so that the cost of publishing such reports could be curtailed at least, if not entirely done away with.

I am going to take issue with the Fair Secretary that has this opinion, and in assuming this position, I believe I am in a position to view the proposition from all angles and in an unbiased manner, since for many years I was engaged in the newspaper business in Iowa, and later have been engaged for the past twelve years at least in the business of presiding over the destinies of a Fair, therefore am in a position to view both sides, without favoritism or prejudice.

The question therefore resolves down to the point of whether it is right or wrong. I am assuming the position that the present law is fundamentally right so far as its application is concerned.

The bone of contention appears to be the cost of publishing. I will take up this angle first.

Secretary Corey has very thoughtfully gathered some statistics regarding the cost of publication of these awards, and I am going to use these figures at this time.

Fifty-six fairs of the State have reported the cost, and I find that the total cost of publishing the financial statement and list of awards for these fifty-six fairs was $3,378.38, or an average per fair of approximately $60.00. I find that the largest sum paid by any fair was $250.00, the smallest sum being $9.50, and that four out of the fifty-six, paid nothing for the publication.

The analysis of these figures shows that there is a big variance in the charges made for this service, which may be accounted for in one word and if you will permit me to use this word I will say "Generosity"—all publishers being generous and some more generous than others. This also goes to show that the publishers of the State of Iowa have no combine, especially when it comes to publishing premium awards, and that the charges depended largely on the expansion and contraction of the word "Generosity," some publishers being more magnanimous than others. The figures reveal that the publishers of Iowa have been very generous with us Fair Secretaries and the Associations that we represent, for which we should commend them.

Personally I believe they should be, as our fairs are unlike other institutions that are conducted for pecuniary profit, and who can afford to pay legal rates for such work. I believe the large majority of publishers of the State are boosters for their local fairs, the figures would so indicate, and that the charges they have made were only nominal, possibly representing cost in many instances, other instances not even representing cost of composition. I believe the publishers realize that the fairs of Iowa are of a sort of semi-public institutions, that they are educational in their nature, and are run for the general good of their respective communities. The figures would also indicate that the publisher also realizes the news value of the printing of premium awards, and that he was crediting back to us this difference, that is the difference between the price he is allowed by law and what he is charging us.

If you will pardon me I will take for example the Fair which I represent. I prepared the copy for publication of our premiums and awards, and condensing it as much as I could, it occupied ten columns of space, or 209 inches of regular newspaper columns. I presented this copy to the publisher of the Fort Dodge Messenger, explained the situation to him and asked him to be as liberal with our Association as he could consistently. He assured me that he would treat me right, that he realized that the Fair Association could not, without great sacrifice, pay legal rates for this publication, and with that I left the copy and awaited the bill, which I had reason to believe would be fair and reasonable and one that we could pay without seriously handicapping us. The bill came, and it was $109.25, based on regular advertising rates, which we had paid for our display advertising. I considered this charge very fair, and the bill was paid without complaint.

Now had we been compelled to pay the legal rates, figured on the basis of ten lines to the inch or "square" as the legal term applies, this publication would have cost us $313.00, or $1.50 per square. Since the average price paid by the fifty-six fairs was only sixty dollars, it appears that the publishers were very liberal, and did not charge more than at least advertising rates, or cost of composition.

So long as the publishers of Iowa will continue to be this liberal with us I am not in favor of any change in the laws, pertaining to the publication of premium awards.

Some of you will take the position why should we be compelled to publish the awards, why not make it a voluntary or optional proposition, as the conditions may suggest. I will tell you why I think every fair should publish their premium awards.

First they owe it to themselves, their organization, and the exhibitors. Your stockholders are interested in knowing where your money goes, the patrons of your fair are interested in knowing where your money goes, and your exhibitor is interested to the extent that he likes to have the public informed, as to his receiving a premium, in other words he is just like all other mankind, he likes to see his name in print, as a winner of a premium at your fair.

Second, and as a business proposition, the publicity in connection with the printing of these awards, is an asset to any Fair Association, and should so be considered, and is worth every dollar any of us have had to pay, if considered in no other manner than as a publicity proposition. No other form of publicity will do you as much good as the printing of the premium awards.

Third, you should all realize that in securing State Aid, that our legislators have a right to demand, and as a principal of good business, insist, on the evidence that we have paid out the sums in premiums that we are asking them to pay aid on. In making this statement I do not desire to reflect on the honesty and integrity of the Fair Secretary. I believe them to be honest, but no matter how honest we may be, no banker is going to loan us money on our honest looks, he demands more, our signature or promise to pay. The State has the same right to demand evidence of our honesty by proof of publication.

We are about to ask our legislators for additional aid. Can we go before them and ask them to repeal or amend to any great extent this law governing the publication of awards, and expect to get favorable consideration from them? Personally I do not believe we can. Let's keep faith with them, and thus merit their confidence and support.

I believe that it is imperative that we as Secretaries of the Fairs of Iowa give full publicity in our various communities, to our activities, by publishing our awards, our financial statements and other important statistical data, and that the law in reference thereto is fundamentally right and should be complied with, and as a suggestion I am going to say that the only changes I would recommend is that a uniform, and summarized form be provided by the Secretary of Agriculture, so that all reports will conform, and that there be no duplication of words or sentences, or extra space consumed to convey the information as it is desired for publication, and thus curtail to the greatest extent the cost of the printing of these awards, and that each Secretary have a common understanding with his local publisher, as to the cost of such publication, based on the information that will be furnished you by the Secretary of Agriculture, that is the knowledge of what the various publishers are charging for this service, then striking an average with such publisher.

I believe that the publishers of Iowa will co-operate with you in this matter and meet you on a fair, equitable and reasonable basis.

I believe the newspaper men of Iowa are with us and for us, and if for any reason your newspapers are not with you, I would suggest that you at once hold a communion with them, and get together. You need their support to make your fair a success, and they need your fair to make the wheels move in your community, and also be ever mindful that your newspaper is your greatest asset when it comes to publicity, and that co-operation is the watchword.

I have written several of the leading publishers of Iowa, concerning this proposition, and have had nothing but favorable replies. In fact most of the publishers have volunteered to give free publication to the list of awards, providing these awards are furnished them when they are news, not a month or more after the fair—but when your fair is in progress.

I believe that if every fair Secretary will see that his newspaper is provided with this information during the week of your fair, immediately after the judging is over, that you need not worry over the charges made —this information can be given out promptly if we will all attend to it. Have your assistants prepare this copy as fast as the awards are made —it is no big job—just a little detail work, that's all—but just as important as any other of the many details of your fair management.

In conclusion I am going to say—don't scrap with your home newspaper —make him your friend—take him in your confidence—and you'll find him as good a booster as any human being—he'll do as much as anyone to make your home fair a success.

The President: We have with us this afternoon Mr. G. L. Caswell, who represents the Iowa Press Association, and he will now speak to you. Mr. Caswell.

G. L. Caswell, Secretary, Iowa Press Association, Ames, Iowa.
Mr. President, Gentlemen:

I am very pleased to appear before the biggest bunch of boosters for the general welfare of Iowa that there is in existence outside of the newspapers. I realize that any work that you gentlemen are doing for the fair associations, you find one big thing that the average newspaper man finds, and I leave it to you if I am not right, and that is a lack sometimes of public appreciation of the disinterested efforts and the awfully hard work you are doing for the public welfare. Am I not right? And the newspaper man is confronted with that thing not one month in the year, or one week in the year, but every time he issues his newspaper. I think it is a 50-50 proposition, that is, on that point, but not just like the 50-50 proposition that you have heard of the Jew having invented. The Jew had invented a certain method of making rabbit sausage, and in making this rabbit sausage he created such a demand that there wasn't enough material with which to fill all of the orders he had. The people began to find after a while there was something else in that sausage besides rabbit, in their estimation, and finally the Jew was haled before the court and asked if he was putting anything into the sausage besides rabbit, and the Jew said yes, and he was asked "What is it?" and he said "Horse meat." The judge said "How much horse meat did you put into the sausage with the rabbit meat?" and the Jew replied "About 50-50." The judge asked "Fifty-fifty? What does this slang expression 50-50 mean?" and the reply came back "One rabbit and one horse." (Laughter.) But it is not on that basis that you fellows who are working for the public interest, along with the newspaper men, are dividing the honors or the complaints of the public.

Mr. Stanberry has presented in every manner that I can present to you the reasons why a fair premium award list should be published. Let me tell you first, however, on behalf of the newspapers, that this law was not helped or advocated or asked by any newspaper man in the state of Iowa. It was sought, possibly, by the fair managers themselves, who realized that there must be some check upon the public expenditure of money in the state. I don't wish to insinuate that anybody in the state thought that any county or district fair was presenting a bill for state aid to equal the amount of premiums at the fair was which in excess of the real amount of premiums paid, which might be the case, but possibly that was the incentive for the law. A good many fairs advertise hundreds and thousands of dollars worth of premiums which are not competed for, and if they are not competed for and the premiums not paid out, that money is left in the treasury, and I presume that is the reason why the state wants to know. But if you publish a man's name as having been paid so much on a cow or a bull, or some other animal, that amount is accepted as having been spent.

I am going to read a paragraph or two from a lot of letters I have gotten from different newspaper men throughout the state. This is from the Spencer News-Herald:

> "We charge our local association 25c an inch, which is less than the regular rate, for we believe it does have some news value; also it was published in both papers here at that price. Our fair association here is not a kicker; in fact, they think lots of the newspapers here, for we give them scads of stuff free. Just before the fair we printed a 48-page fair edition, and have done that every year of the fair. Starting several weeks, or months, ahead of fair time we run stories about the forthcoming fair. I presume it is safe to say that we give our fair twenty or thirty pages of free advertising every year."

Some donation to the fair, isn't it? And that is an example of the good co-operation of the fair manager with the newspaper. That kind of co-operation can be worked out, I will declare, in every other county where it is properly handled.

Here is one from the Knoxville Express:

> "We charged five cents a line for the printed awards of the Marion County Fair, which amounted to $134.40. We probably gave the fair $1000 worth of free publicity counting our rates at 10c a line for readers. One whole issue of the Knoxville Express was devoted to boosting the organization. Ribbon lines were run across the first page for the fair. This concession can not be bought at any price. Am only speaking for the Express."

The position given these notices for a period of several weeks was front page with leading display heads, which nobody could buy.

> "Merchants of Knoxville, who are stockholders in the Fair association concede that the publicity given by the Knoxville papers is responsible in a great measure for the success of the Marion county fair."

That indicates right there that there is an advertising value, and I speak of this so that I won't forget it. In the publication of these awards there is an advertising value for your fair that you will realize on the following year. The man who has received an award on any kind of premium at this year's fair, seeing his name in print and having the gratification of having won the blue ribbon on his hogs or cattle, naturally is more interested in following that up the next year. I believe you will agree with that.

The Newton Daily News of Jasper County says:

> "During the county fair we have a reporter on the grounds and write up feature stories. We estimate the free publicity at least $150. Our advertising man wrote up all the ads used by the fair association at no charge. We think we do our county fair a whole lot of good. Enclosed is a sample of the way we set up the premium matter."

This is a sample of the way they set it up. (Displaying full page of premium lists.) It is what we call leader-and-figure work. Some of you are interested in some counties and some in others. Down here at Winfield, Iowa, in the Beacon, they say:

> "Not until this year have we been paid for these publications. The fair secretary has always furnished us with them and 'thanked us kindly.' This year we charged 5 cents a line.
>
> "Of course, there is some news value connected with it, but not enough to sacrifice some sixty bucks.
>
> "Many weeks ahead of the fair we always devote columns to a general boost for the coming exhibition, for which we receive complimentary tickets for ourself and wife."

The Manchester Press says:

> "The list this year made 48½ squares and we charged a total of $1 a square for the two papers here—50 cents for each. Our charge was $24.25, and the Democrat's the same.
>
> "I presume the list has some news value, but it is a trying thing to set and on that account, as well as the volume of it, not many papers feel like publishing it solely because of its news value. I figure that 50 cents a square is not too much for it.
>
> "As for free publicity—Lordy, Lordy! We furnish it by any number of columns, front page, freely and gladly, to help the cause. We don't even get tickets to the fair, but pay our way with the rest, which is all right, so long as the deal is even partially evened up. That's all we ask."

The Audubon Advocate:

> "The rate has been left to bargaining between the secretary and the publishers. We publish them this year at the rate of three and a third cents a line, but have reason to believe that we under bid our competitor considerably to do it. We have taken the view that they have some news value, but no more so than board proceedings. We believe that a rate of five cents per line would be fair to the fair management and profitable to the publisher. We gave the fair about sixty column inches of front page publicity before the fair and secured about 250 inches of paid advertising at regular rates.'

The Marshalltown Times-Republican:

> "This newspaper, taking the part of a booster, has run columns and columns of publicity matter for which they did not except any compensation, simply to make our fair a success. The fair management have been very liberal in their space advertising which they have bought, running pages and half pages in advance of the fair, for which they paid the regular advertising rate of this publication."

The publicity given by these newspapers, in my judgment, is what makes the fair a success. When the advertising manager of the Minnesota State Fair gives you the testimony that was given here a while ago, it indicates to me that there is no further argument left on that, but the kind of free publicity you get by cooperation with your local newspaper man is the kind of publicity that you cannot buy, and that is the kind that is best. You cannot buy in my paper an editorial expression for any amount of money, or you couldn't buy a front page with a triple head on it, but I have gladly and often given you that.

I am not arguing whether you should retain this law, or not. I believe personally you could accomplish much the same results and comply with the law if the law made it possible to publish a condensed statement. In that way you would eliminate the one good feature, and that is the publication of the name of each man who received a premium. You could say so much was paid out for horses and so much for hogs, sheep and poultry, and then make your final financial statement, and have that properly sworn to before the fair offices. That ought to go with the state and fulfill all requirements of the law.

In some of my own experiences I have stood around the secretary's desk at district and county fairs for hours at a time trying to get the premium list that I might publish it the same week that the fair was held or the next week, and absolutely couldn't get it. Your fair secretaries are busy as any men I have ever seen. You are as busy as I am here during a state association meeting, but I laid down on that secretary for six solid weeks and couldn't get the list then until some officers went down and got the list from him for the newspapers. The news value is gone by that time, and the space is wasted.

I thank you. (Applause.)

The President: We will listen now to any questions that you would like to ask.

Mr. Barber: We furnish to our newspaper each night a list of the fair awards, but it is not acceptable to the state in that form, and we have to redraft it. They go through during the week and publish practically 75 per cent of the premiums, and then next week you have to publish it all over again, so that you have to pay for it. I think the list should be published, but I think it absolutely unnecessary to make repetition and publish it two or three times.

The President: I don't believe you understood me, Mr. Barber, in my paper. I may not have made it clear that my suggestion was that we condense the form and cut it down to as few words as possible to make it comply with the law, and these letters that Mr. Caswell read would indicate it. In fact, I have here—I am all in favor of condensing—I have here a form that was published this year in the Messenger of 209 inches, where some other fellow had 400 and some odd inches, and he didn't have as many premiums as we did. He had duplication of words and many more lines. I have several copies of this paper here and if anybody wants to see this form we will be very glad to furnish it to you. I am in favor of condensing the premium award list and cutting it down to as few words as possible. My idea was to convey the thought that we should as fair secretaries give full publicity of what we are doing at home. Let the people know what we are doing and let the people know that John Jones got a premium on a bull or on a horse, and that the little Smith girl got a premium on some jelly and things of that kind. It is an asset to us, there is no question about that. It does us a world of good.

Now, since time is limited, unless there are other questions, we will proceed with the business of the program. Are there any other questions on that, that we can have answered briefly? If not, we will be glad to listen to the report of the credentials committee next.

Mr. Bacon: Mr. Moore, the chairman of the credentials committee, asks me to read the report.

The report was read.

Motion made by Mr. Clark, seconded by Mr. Beckner, and unanimously carried, that the report as read be adopted.

The President: Now, there are several fairs here that have not paid up, and as I understand it they must be paid up before they can take part in the election of officers. Those of you who have not paid your dues, see Bacon and pay him. We need the money! There are very few, however. I think most of you have paid your dues. If you have not, I hope that you will not delay. You realize that this association has done us a lot of good as a body as well as individuals, and the fee that we have to pay in dues is trivial as compared with the benefits we receive.

I also want to say this, so that there may be no misunderstanding about it, and that is, the fact that you are paying your dues here today does not have anything to do with, or any effect upon, the meeting tomorrow. Just because you are a member of the Iowa Fair Managers Association doesn't make you eligible to vote tomorrow at the meeting of the State Board of Agriculture, but for fear of any misapprehension I wished to call your attention to that. Any of you who have not paid your dues can go there tomorrow and vote. I also wish to call your attention to the banquet which will be held in the room adjacent, starting at 6:30, and we have a very good program and a good entertainment, and if you haven't procured your tickets, you can get them from Mr. Gatch, the treasurer.

Moved by Shipman, seconded by Barber, that the credentials committee report at the banquet tonight all members or fairs in the state of Iowa who have not paid their dues to this association. Unanimously carried.

Mr. Shipman: I have tried to collect dues from fairs that have not helped pay the expense of getting this additional state aid, and I want to know whether they have done anything or not.

The President: I know of one fair down in your territory that has paid. There are others that have not paid, it is true. I think there are only two or three or four that have not paid.

Mr. Bacon: Are you referring to back dues?

The President: Yes.

Mr. Bacon: I think there are only three that have not paid their back dues.

The President: There are only about three fairs that have not paid, and I don't believe we will condemn them to stand up in the front row if it is not paid.

Mr. Gatch, the report of the treasurer was to have been read this morning, and we had to pass it up because you weren't ready with it. Are you now ready?

F. A. Gatch: Treasurer.

REPORT FOR JANUARY 1, 1919, TO DECEMBER 2, 1920.

Total amount of cash received	$2,822.66	
Total amount of disbursements		$2,531.87
Balance on hand December 2, 1920		290.79
	$2,822.66	$2,822.66

Motion made by Harvey, seconded by Williams, and unanimously carried, that the report of the treasurer be adopted as read.

The President: Now, the next thing in order is the election of officers for the ensuing year. The first in order is the nomination for president.

Mr. Harvey: I would like to nominate the present officer, Mr. Stanbery.

Mr. White: Second the motion.

The President: Before you go any further, I really would rather see somebody else. I am willing to do all I can, and all that, but let somebody else have it. I think there are plenty of fellows here in this bunch that would be glad to take it, and I have had it two years. My suggestion is that you let somebody else take it.

Carl Hoffman: I nominate Mr. W. R. Scholfield, of Eldora.

The President: Are there any other nominations?

Mr. Clark: I second the nomination.

Mr. Hoffman: I move that nominations cease, that the poll be declared closed, and that the rules be suspended and the secretary instructed to cast the entire ballot for Mr. Scholfield as president.

Mr. Young: Second the motion.

Motion put and unanimously adopted. The secretary thereupon cast the ballot of the entire association for Mr. Scholfield as president.

The President: Mr. Scholfield will be your next president. Mr. Scholfield, will you come forward and relieve me?

Mr. Gatch: He just beat it out of the back door.

The President: The next is vice president.

Mr. Mullin: I wish to place in nomination, Mr. Carl Hoffman, of Cass county.

Mr. Kaskey: Second.

The President: Are there any other nominations?

Mr. Hoffman: I wish to decline—

Voices: Sit down. Question.

The President: Are there any other nominations?

Mr. Mullin: I move that the nominations be declared closed, the rules suspended, and the secretary instructed to cast the entire ballot of the association for Mr. Carl Hoffman for vice president.

Mr. Young: Second the motion.

Motion unanimously adopted. The secretary thereupon cast the entire ballot of the association for Mr. Hoffman for vice president.

The President: The next in order is nomination for treasurer.

Mr. Barber: I nominate for treasurer to succeed himself, Mr. F. A. Gatch of Greenfield.

Mr. Beckner: Second.

The President: Are there any further nominations.

Mr. Zerwick: I move that nominations be closed, the rules suspended, and the secretary instructed to cast the entire ballot of the association for Mr. Gatch to succeed himself as treasurer.

Mr. White: Second.

Motion put and unanimously adopted. The secretary thereupon cast the vote of the association for Mr. Gatch to succeed himself as treasurer.

The President: The next in order is secretary.

Mr. Young: I move that the present secretary be retained for the ensuing year, Mr. Bacon of Davenport.

Mr. Beckner: Second the nomination.

The President: Are there any other nominations?

Mr. White: I move that nominations cease, that the rules be suspended, and the secretary instructed to cast the vote of the association for Mr. Bacon to succeed himself.

Mr. Steward: Second the motion.

Motion unanimously adopted. The president thereupon cast the vote of the association for Mr. Bacon to succeed himself.

The President: As to the district managers, they are appointed by the executive committee. The officers get together and appoint the district managers, so that we will not have that to do today.

The next will be adjournment, and don't forget those of you who have not procured your banquet tickets to get them.

Motion made, seconded and adopted that the meeting adjourn until banquet hour.

TUESDAY, DECEMBER 7, 1920.

BANQUET HOUR.

Banquet.

The Toastmaster: Please come to order! We have at the head of the table with us tonight the fellows who preside over the destinies of the Iowa State Fair, the State Fair Board. I am going to ask them to stand and we will sing a little verse to them to show that we appreciae the services that they have rendered. Will the State Fair Board please rise? (Applause.)

Now, gentlemen, we also have with us a man at the head of the table here who has been a friend of the fair secretaries of Iowa. He has been a man that has helped us through on our state appropriations and has fathered the bill known as the Santee bill. I am going to ask Mr. Santee to stand while we sing him "How do you do, Mr. Santee, how do you do?" (Applause.)

As is customary, we have with us tonight a man who, of course, will extend to us the keys of the city, etc., in the person of Mayor Barton. I will now introduce you to Honorable Mayor Barton of Des Moines. Mr. Barton. (Applause.)

H. H. Barton, Mayor of Des Moines.

Mr. President, Members of the Iowa Fair Managers' Association:

I know that you expect me to say that this is an honor and a great pleasure to welcome you to Des Moines, as that seems to be the customary way of making a welcome. I assure you that I do extend to you this welcome in all sincerity.

Now, my speech, gentlemen, is going to be a little like the ladies' modern dress, it will be long enough to cover the subject, and short enough to be interesting. (Laughter.) In looking over this crowd of gentlemen, it seems to me that this is certainly a very representative gathering from all over the state of Iowa. It seems to me that none are in better position to keep Iowa famous than you gentlemen here.

A few days ago a gentleman came into my office who had recently returned from California, and he told me that he had been in California as a resident there for nine years, having lived formerly in Iowa. I asked him, "How does it seem to get back to good old Iowa after an absence of nine years?" and he replied, "It does seem mighty good to me." And in speaking of California he said, "The trouble with the fellows out there is that it is a land of beautiful flowers and notorious liars." (Laughter.)

Now, gentlemen, this is the point. The more I see of Iowa the less I think of the outside. (Applause.) I don't believe that we appreciate the resources which we have within our great state. This appealed to me as being a sort of family gathering. I don't know how to compare it to anything else. Now, in your deliberations I know that they will be profitable, but I would suggest to you that you get out and see what we have in Des Moines and enjoy yourselves, and I hope that you will be so well taken care of while you are within our city that it will be your fond ambition to again return to Des Moines for your next convention.

Now, gentlemen, I greet you and welcome you to our city, and if there is anything in the virtue, the old saying of turning over the keys to the city, the keys are in your hands, and I know they are in very safe keeping.

I thank you. (Applause.)

The Toastmaster: I see that I am on here for a response, and I am sure that I can keep the mayor company, because mine will be so short it won't even cover the subject. (Applause and laughter.) We certainly are glad to be in Des Moines again as fair managers. I think it is about the thirteenth or fourteenth annual convention that we have held here, and I presume we will continue holding them here as long as you have a city big enough to hold us, and I assure you that we appreciate your good welcome.

I next have the pleasure of introducing to you the Hon. J. B. Weaver, whom you all know, and who needs no introduction. Mr. Weaver.

J. B. Weaver, Des Moines, Iowa.

Mr. Toastmaster, and Gentlemen:

It is a pleasure to me to look into the faces of so many men connected officially with the great business of the fairs of Iowa. I am glad to share with you in welcoming in song my old friend and colleague Santee-Claus, who brought you your bill. (Laughter.) I am also glad to see here tonight Uncle Charley from up there at Alta, and to see him looking so comfortable, with a smile on his face. I didn't expect that after the recent avalanche of November 6th. (Laughter and applause.) You know, when I met him out in the lobby here a while ago he came close to me and whispered in my ear, "When I came to prepare my statement for the secretary of state, Mr. Weaver, it said 'No contributions and no expenditures,'" and he looked so proud, until I whispered in his ear "And no results." (Laughter.) And here is Billy Morrow. They make a team hard to beat. I am glad to see them here, these men who are in their personalities a part of the development of this great state agriculturally, and they have brought honor to the agricultural interests of the state immeasurably.

Your chairman introduced me briefly, and I have had many introductions like it in my experience. I like the one that an old German gave Senator Spooner on one occasion when he was speaking in his native state of Wisconsin. The introduction was this: "Ladies and Shentlemen, I been askt to introduce Mr. Spooner, who iss to make a speech. I haf did so, and he will now do so." (Laughter.) I saw an interesting introduction the other day which I am glad was not given me tonight. It was an introduction given by one introducing Lloyd George. He said, "I have the honor tonight to introduce the prime minister, who comes to answer charges of the bishop with respect to the re-establishment of the Welsh church. In my opinion the bishop is the most unmitigated liar in the world, and I thank God tonight that we have in Lloyd George one who is his equal." (Laughter.) I am glad that I was not introduced thus.

I will just talk to you briefly, for you have a long program tonight. In the matter of fairs, I have been up in western Canada where they are endeavoring to establish a great agriculture, and will succeed, but I tell you those first fairs in Canada were meagre affairs, but they were the beginnings of the injection into the district served by those fairs of the idea of competition, of stimulation, of effort; the expression of the sense of pride of the district in what it can do. They are the beginnings; just such beginnings as I used to see when I was a boy down in Davis county. What a time it was, those fair days. We looked ahead to them with as much anticipation almost as we did to the coming of the circus. Everybody came in a buggy—there wasn't an automobile thought of in the world in those days. They came in buggies and wagons, bedding the children down in the straw with comforters and robes, and perhaps father and mother sitting across a board in the wagon. And so they came to the fair. Those were the pioneer days, the days of the beginnings, gentlemen, the laying of the foundation of that which you have achieved today, wonderful development now in this great complex age, in the life of the state.

There was one man that always stirred me through and through. Oh, what a thrill would go through me as I saw him riding a great brown horse, with head up and tail extended, prancing about the grounds. And like a statue on that horse would sit this man, so straight and handsome. He had a big soft hat, and side-whiskers like we used to see Vanderbilt wear, and a curly mustache, and about his waist was a great big red sash that floated and fluttered in the breeze as he dashed about the grounds. And that man was T. D. Doak, who used to attend your association. He was always an inspiration to me.

I want to tell a story, if I may, of what happened out here at the state fair, Charley—your fair and mine. (Laughter.) Up here on Bear Creek —I won't tell you what county Bear Creek is in—lives a lean, wizened, cross-eyed, crooked-back little fellow whom I have visited periodically for a good many years. I wouldn't be surprised some of you men who come here know where he lives down on Bear Creek. When I am down in that locality I go down to see him, and the dinners that Mrs. Nat gets out of their cave-home makes this dinner, good as it is, look like thirty cents. And one day when I was there I conceived an idea, and I asked "Have you ever been down to Des Moines?" and he answered that he had not. And I asked "Have you ever been down to Boone?" and he said that he had just once. I turned to his wife and said, "Have you ever been out of the county?" and she said, "Never." And so I conceived the idea of having them come down to the state fair, they and their nine children, and I suggested it to them, but with no success. I felt that it would be a great occasion in their lives and begged them to do it, but my only reward was the reply, "I cannot leave, I cannot leave." But about ten days before the fair I sent up ten dollars to bring them down on the Inter-Urban, and urged them to come. I got no answer to my request, and I happened around there a day or so before the fair, and after much urging they finally agreed to come, and I said, "You take the train at 7:37 in the morning (some of you will probably recognize the station from that description), and you will be in Des Moines at 8:30," and he said, "No, I don't think I could do that," but he said he could take the train at eight o'clock and get there at nine or take the nine o'clock train and get there at 10:30; so I said "All right, I will be there with my auto and meet you at 10:30." I was at the station at that time, the train came in, but no Nat, and I was just about to turn away in disappointment and return home when I found him standing beside me, and when I asked him when he got in he said, "We got in at 8:30 and we have been waiting for you ever since." And there they were sitting in a row on the depot seat at the Rock Island station waiting for me, not daring to turn a wheel in this great city. So I gathered them together and got them out to my auto, and I said, "What do you want to see?" and he said, "I want to see the chickens" and I took them through the poultry exhibit at the fair, and then we went down and got our dinner, and as we were starting for the grandstand we came upon one of those big, round, cylindrical motordroms where motor-cyclists ride about the inside of the great bowl. I took them all in and got them around the edge to watch the races, and as the rider started with his motorcycle inside of the bowl and got to going faster and faster, the motor roaring, and the momentum shaking the whole building with its fury, old Nat turned to me and said, "This is too much for me," so we got down and started for the grandstand. The bands were playing and there was the usual amount of noise and confusion of the state fair, with hundreds and thousands, and scores of thousands of people going this way and that, and presently I found myself walking alone, and I turned around and looked back and there they were with their heads all together like birds, and in answer to my question of "What's the matter?" I learned there was too much noise, too many people, too much excitement; they wanted to get back on Bear Creek, and I said, "What's the matter?" and they said, "When does the train start for home?"

That is what happens at the state fair—so many people, so many exhibits, so much excitement, that it almost is too much for some of the common people of Iowa.

Well, gentlemen, in this matter of agriculture, we are in wonderful times, very trying times, and all over Iowa the thought is unanswered with regard to the tremendous slump that has occurred in farm values. Now, remember this, gentlemen, you may think this is wrong, or that is wrong, or the other thing is wrong but we are suffering in the state of Iowa with the rest of the world as the result of the greatest piece of fratricidal strife in the history of the world and one great big word could be written on the wall as an explanation of our difficulties, and that would be the word "WAR." In this complex time the thing for us to do is to hold ourselves steady; let us not get excited too much; let's be steady until this turmoil, this milling, milling, milling, has stopped. You farmers know what it is when cattle mill. The world is milling, so let us stand steady here in Iowa and whatever may be said of Iowa, it is the safest, the most prosperous land in all the world today. We must wait for world reorganization. And tonight in this city there will be held later a meeting by one of the very greatest organizing geniuses of the world, and since he cannot speak to you, let me do it, inadequately as I may do it, in his stead. He comes to you and to me bringing to your safe homes, to bring to your not yet exhausted pockets, to bring to the farms and the people of Iowa who are yet safe in their lives and in their families, he is bringing the call of 3,900,000 children who are to be the fathers and mothers of the days just ahead of us, and we are all interested. Why, today, gentlemen if we had Europe busy, if we had Europe organized and doing business, every ounce of food that was produced in the state of Iowa, all the excess would be in great demand, and I think you would be getting double the price for it that you are offered today for the products of the farms of Iowa. But the point I make is, let's hold steady—we owe it to our time, and if we cannot keep steady, what people in the world can?

Now, that doesn't mean that there aren't things that we can do. There are things that we can do, and that we must do to better agricultural conditions, even here in this great favored state, but remember, gentlemen, let's be certain of this, there can be no question about it, that we have 110,000,000 population in the United States; we have a great section of the world that cannot produce cattle and hogs and dairy products as we can produce them. People must be fed, so we must do all we can to make conditions better; but be sure that in Iowa we have the essentials of wealth, and those essentials will come back to us if we will hold ourselves steady and not go after false gods. Good times will come back to us and we will take a deep breath again of satisfaction in contemplation of the wonderful prosperity of state and the wonders of agriculture. I often think of this great Louisiana Purchase and what it has meant to the world. In 1802 Jefferson and his delegates went to Paris to buy a little section of land around New Orleans, and they were offered by Napoleon the whole Louisiana Purchase. And what did that mean? Thus were carved from the great domain of the Louisiana Purchase, Missouri, Arkansas, Iowa, Minnesota, North and South Dakota, Nebraska and Oklahoma in their entirety, and much of the greater part of Kansas, Colorado, Wyoming and Montana, comprising 640,000,000 acres, at a cost of 3 1-3 cents an acre—$15,000,000 for the whole empire—$15,000,000; less in value than two townships in most any county that is represented here at this meeting tonight. Never was any such great section in the world achieved at so low a cost. And what has it done? It has made possible for the surplus populations of this nation to get homes and purchase food for the world, all on this marvelous place that is called the Louisiana Purchase. That is one of the great things achieved in the life of the world, as well as in the life of the nation.

I said there may be some things done by legislation, but I think, gentlemen, to be perfectly frank with you, that more can be done effectively through organization, through the elimination of that great gap between the man who produces the food and the man who consumes the food. Much more may be done by organization, one balancing the two, legislation and organization, than by legislation, and I welcome this great Farm Bureau movement; I welcome this great movement you are stimulating at the fairs, better conditions on the farm, better production, and all of that, and the marketing question is the great coming problem in agriculture, and must have the help of the most intensive organization, as it must have, and such legislation as is possible. What can be done in legislation? I have in mind two things—200,000,000 bushels of corn are available from Argentine—I think it will help some to say that that corn shall not enter in competition with the corn from the farms of Iowa except under a proper tariff. I believe in that. (Applause) Another thing, 300,000,000 pounds of coconut oil is competing with your dairy products—six times as much as before the war; 200,000,000 pounds of soy-bean oil, also a competitor, came into this country—ten times as much as before the war; 427,000,000 pounds of wool came into this country in competition with American wool. Now, gentlemen, some one will answer me, I think not among you, but others will say "Now, Mr. Weaver, by advocating the protection of the American farmer on these products, are you not making for the rest of the people a higher cost of living?" Now, there is one fundamental answer to that proposition, and it is this, that agriculture lies so at the foundation not only of the life of Iowa, but of the life of the nation that in order to have any superstructure of provisions for manufacturers or retailers, or any of these great lines of Industry, in order to have success in any of them, it is necessary and essential that agriculture has every possible encouragement, because it is the foundation of American life. So that the first consideration must be for agriculture, and the problem is not easy; it is not easy to formulate a complete program as to what can be done to improve agricultural life here.

Another thing that will help—we raised this year from direct taxation for expenses, every dollar of it expended in the expenses of maintaining the government, $5,400,000,000. It will help some for agriculture to have the cost of government enormously reduced, as it ought to be here in America, and to that end we must have in the national government what they have in Illinois—we must have a thorough budget system, so that every department of the government will be given just so much money on which to live for the coming year, and hold within that expenditure. The haphazard method of conducting our national government is the most wasteful thing, almost, in the life of the nation. And so legislation may help some in that.

As I said before, we are all suffering from the war. Gentlemen, let us remember this, that we are in the midst of very great world movements. The white race in the world amounts to only 500 million people. There are black and yellow and brown that amount to 1,150,000,000 people. Do you know that in 1500 there were only 3 million people in the British Isles, a little more than we have in the state of Iowa. That was in 1500. There were in continental Europe only 70 million white people in 1500. And then came the Renaissance, that great period of revival of learning which produced Columbus, which produced the great artists and sculptors. And then came the discovery of America, followed by immigration to America and the subsequent taking of this land in America by the white race, so that today, from that small beginning, we have 500 million whites in the world, with 1,150,000,000 black, yellow and brown in it. Note that fact, we are carrying to those 1,150,000,000 black, brown and yellow people of the world the education of our time. We are carrying them the material progress of our time, the machinery of our time, the ideas and incentives of our time. We have carried to them that which will multiply their birth-rate enormously as compared with the past. Formerly epidemics and the like was what kept down the dark races. It is very important that this world be organized on a friendly basis, if it is possible to so organize it, and it is important that we should stabilize conditions throughout the world by the use of wise diplomacy in order that we may find a market for the products of the farms of Iowa.

One thing further and I shall have finished. There came to my home this week my daughter from Minneapolis, with the most amazing grand daughter that you ever heard of, of course (Laughter), and as I held her in my arms today noon—I won't attempt to describe her to you, gentlemen, you know the symptoms; you all know such of you as have grand children—she looked at me with wide-open eyes, looked into my face for what—for what, gentlemen? Whenever I look at her I think of the great army of children who are looking for you and me to do our share in keeping and making this world worth while. Can we shut out from our lives those pink little bodies, those millions of children, that appeal to us for help? If we are able to stand upon our own feet and yet not do what ought to be done without fear or favor of any man whatsoever,—if we cannot do it for them, God knows what kind of blood runs in our veins. And what do I want for her? What do I want for her? I know she is one of the 26 million now, 50 million by the time she comes to womanhood, and I want her to have every opportunity because she is going to share in government; I want her to do her share and have the right spirit, for you fair men are engaged, not only in producting products, and your fairs are a success only insofar as you are organized, but you are engaged in building character in the state of Iowa and in this old nation of ours. McCauley said, referring to America, one hundred years ago: "America, I appeal to the twentieth century." And today, in the great industrial era that has come upon the world, it would try men's souls as it would try our economic systems, but it is the duty of each one of us to be true and sweet and fine and strong so that we may go out and we may say as the poet said:

> "My task accomplished, and the long day done,
> My wages taken, and in my heart some little lark singing."

Character, gentlemen, is something more than our fairs, it is more than anything in the world. Character has given us the great line of statesmen whom you and I remember today with such endearment. Character, nothing but character, gave us the boy in the back-woods of Kentucky, who brought us through four years of fratricidal strife, that great name that stirs with increasing power within us, that name, Lincoln, of whom Ingersoll said "He has the sweetest spirit in our world." (Applause.) Jan Smuts gave forth a great sentence when he said "The tents have been struck, and the great caravan of humanity is once more on the march." It is on the march! The backward places of the world are stirred as they never before were stirred; this nation is stirred as it never before was stirred; this is a time of flux. But remember, we live under no tyrannical government. We live under the flag that has always looked out upon the turmoil of the world with ideals of brotherhood and fellowship. We must suppress our grumbling, for of all nations we are the most blessed, and it is for us to see every morning, as we look at the golden sunrise of another day, the blessings and privileges of being a part of our American life.

I am going to tell you a story in closing. In the old days the great epigrammitist Antipater of Sidon prepared a list of the seven wonders of the world, and I wonder if I can tell you what they were. Now, note the character of these wonders, for they came down to my time as the seven wonders of the world. First, there were the pyramids of Egypt, built to commemorate the life, and to act as a tomb, for some tyrant king. Next, there were the wonderful hanging gardens of Babylon. Legend has it that King Ninus married Semiramis, a hill woman, and on the plains of Mesapotamia where she lived she became lonely for her native hills, and so King Ninus built her those gorgeous hanging gardens. That is two. Then there was the Statue of Zeus by Pheidias at Olympia. That was three. And the fourth was the Temple of Diana at Ephesus. When Paul was preaching at Ephesus about the one God, Artemis, I think it was, a silversmith by profession, a maker of idols, became incensed at the prospect of the destruction of his business and got the rest of the silversmiths together and said, "This fellow is going to interfere with the idols that we have been selling to the people, and we would better protect ourselves." So he got the population together and marched through the streets crying "Great is Diana of the Ephesians," and they went to the temple which we are told was 400 feet long, 60 feet high, with 60 giant columns supporting the roof. That is four of the great wonders of the world. Then came the Tomb of Mausolus, erected in Halicarnassus by Queen Artemisia in memory of her husband, King Mausolus. That is the fifth. And then there was the Colossus of Rhodes, that most marvelous statute; and then, finally, the Lighthouse of Alexandria. That completes the seven great wonders of the world. But note this, gentlemen, they were all physical achievements, some big structure made by the hand of man to wonder at.

Now, recently there has been a list sent to a thousand Americans and Europeans, the great men of the time, asking them for their selection of what are the modern seven wonders of the world, and what do you suppose they are? Note them! Wireless, the telephone, aviation, anticeptics and antitoxins, the x-ray, radium, and the solar spectrum. Every one of them things that are necessary and important to the betterment of human conditions. Think of that change in conditions! The great note in our age is service, is usefulness; and the man or woman who does not catch that note goes out of human life without the greatest thing that is in the world.

Hugo in his great story "Les Miserables" has Jean Valjean carrying Marius through the darkness, stumbling hither and yon, but pretty soon his eye adapted itself to the night and he could see the outlines of the great structure in which he walked, and so Hugo shows from that that as the eye dilates in the night and finds light in it, so the soul dilates in misfortune and finds God in it.

Now, since this great cataclysm has already shaken loose the rivets of the world and almost brought it to wreck and ruin, it is for you and me to find something to carry in our hearts to make us better men, and that something should be the ideal of service, the ideal that sent our boys to the other side, leaving 80,000 of them fallen, with the flag before them, with the roar of battle in their ears, forever to sleep under the wings of renown.

It is the note of service, the service you are rendering in your great organization, that has in it the great opportunity to teach people of this state. While three or four hundred thousand people attend our great state fair, five or six or seven times more attend the great county fairs you represent in your state organization. And so it is up to you and me to be as helpful in our time as we can.

Kipling says:

If you can keep your head when all about you
  Are losing theirs and blaming it on you;
If you can trust yourself when all men doubt you,
  But make allowance for their doubting you;
If you can wait and not be tired by waiting,
  Or being lied about, don't deal in lies,
Or being hated, don't give way to hating,
  And yet don't look too good or talk too wise;

If you can dream and not make dreams your master,
  If you can think and not make thoughts your aim,
If you can meet with triumph and disaster
  And treat those two imposters just the same;
If you can bear to hear the truth you've spoken
  Twisted by knaves to make a trap for fools;
Or watch the things you give your life to, broken
  And stoop and build them up with worn-out tools;

If you can make one heap of all your winnings,
  And risk them on one turn or pitch and toss,
And lose, and start again at your beginnings,
  And never breathe a word about your loss;
If you can force your heart and nerve to sing
  And serve your turn long after they are gone,
And so hold on when there is nothing in you
  Except the will which says to them "Hold on!"

If you can talk with crowds and keep your virtue,
  And walk with kings, nor lose the common touch;
If neither foes nor loving friends can hurt you,
  If all men count with you, but none too much;
If you can fill each unforgiving minute
  With sixty seconds worth of distance run;
Yours is earth and everything that is in it,
  And, which is more, you will be a man, my son.

(Applause.)

We ask that for our sons, and we must have it for our boys, and it is for us to set the example which will bring them to that fruition of manhood which makes a true and fine American.

I thank you! (Applause.)

President-elect Scholfield: We will now hear the report of the resolutions committee:

E. W. Williams:

REPORT OF THE RESOLUTIONS COMMITTEE

Your committee on resolutions beg to report the following:

Resolved, That the Iowa Fair Managers in meeting assembled do request the American Trotting Association at its Congress to be held in

February, 1921, to re-enact the old rule whereby records made in any year previous to and including the week of July 4th be a record only and not a bar to races occurring after the week of July 4th in any year. This will tend to make better races and keener competition.

Be It Further Resolved, That all members of the Iowa Fair Managers Association be requested to join the American Trotting Association for 1921.

Resolved, That a great part of the unnecessary expense incurred in the printing of the complete list of premium winners and amounts won in the different classes be largely eliminated by the publication of the financial statement and a condensed report of the premiums set out in totals of the different breeds and classes, which will in a great measure secure the same purpose with a marked saving to the different associations and societies.

Resolved, That this association most heartily commends the labors of the officials of the Iowa State Fair in conducting an exposition, which in magnitude and educational value is unsurpassed by any other state fair.

Resolved, That this convention extend to the officers of our association a vote of thanks for their untiring efforts in the conducting of the affairs of this association and making this meeting a success.

(Signed) E. W. Williams,
J. P. Mullen,
Frank C. Young.

I move the adoption of that report.

Motion duly seconded and unanimously carried.

President-elect Scholfield: I will at this time make appointment of the entertainment committee for next year. The committee will consist of Roy Wilkinson, E. W. Williams and Logan Urice, together with the officers.

Entertainment.

President-elect Scholfield: There is a matter I want to bring up at this time, and that is whether or not we shall have the spring meeting, and I would like to have an expression from you at this time. It has always been customary to have a spring meeting, and because of the small attendance there has been some discussion for and against. I would like to have a motion as to whether or not this spring meeting will be continued.

Mr. Stanbery, you have always been here. I would like to hear from you on this subject.

H. S. Stanbery: I think that at the last spring meeting there were a few on hand, and I don't know where the next spring meeting was to be held, I don't know whether it was to be at Des Moines or Waterloo. Was any definite action taken at that time? Well, so far as I am concerned, I would be glad to have these spring meetings, and I would be pleased also to have it at Fort Dodge again, or at any other point that you want the meeting. We had a very nice spring meeting this past year and organized our circuits there, a thing that has been of help to all of us. Personally, I am in favor of the spring meeting.

President-elect Scholfield: Any other member like to express himself with regard to it? Mr. Mullen?

J. P. Mullen: It seems to me that Des Moines is more centrally located for all the secretaries, and this is where it ought to be held. It is a matter of importance to the attraction men to arrange for the different kinds of fireworks at this meeting, and I am in favor of Des Moines.

President-elect Scholfield: It seems to me that the two speakers we have called on are favorable to it. Are there any speakers unfavorable to it? If so, I would like to hear from them. All those who will promise to attend a spring meeting, please rise.

Six or eight stand to their feet.

President-elect Scholfield: In order to get it definitely and formally before the meeting, all in favor of a spring meeting, this coming spring, please rise to your feet.

Six rise to their feet.

President-elect Scholfield: Those opposed to it rise.

None opposed.

President-elect Scholfield: In other words, you don't care anything about it. With the interest that is taken in it, I don't believe the officers ought to go ahead with it, unless later on some definite action is taken.

Entertainment.

PART IV

Live Stock Awards of the 1920 Iowa State Fair and Exposition.

HORSE DEPARTMENT.

SUPERINTENDENT............................C. F. CURTISS, Ames

PERCHERONS.

EXHIBITORS—F. Berkey & Son, Ankeny; Chas. W. Brown, Marcus; A. L. Champlin, Ames; Dunhams, Wayne, Ill.; W. J. Dawson, Washta; L. M. Ellyson, West Branch; J. O. Gring, Dallas Center; S. M. Hague, Waukee; E. P. Hamilton & Sons, Garden Grove; R. W. Hoit, Beacon; Hemmingway Bros., West Branch; E. E. Ives, Oskaloosa; W. T. Jack, Lisbon; W. L. Joy, Grand Junction; Frank Keenan & Son, Shenandoah; Lakewood Farm, Rock Rapids; Lee Bros., Mitchellville; G. D. Mathis, Bondurant; N. W. Murrow, Jr., Mitchellville; M. C. Peters Mill Co., Omaha, Neb.; Clarence E. Peterson, Peterson; Chas. P. Quirin, Marcus; Rookwood Farm, Ames; J. C. Redmon, Altoona; Springbrook Farm, Walkersville, Md.; J. O. Singmaster & Son, Keota; Truman's Pioneer Stud Farm, Bushnell, Ill.; Van Auken & Fraser, Humboldt; Van Buren Percheron Horse Co., Preston.

JUDGE................................A. L. ROBINSON, Pekin, Ill.

Stallion Five Years Old and Over—First, J. O. Singmaster & Son, on Lagos, 99093; second, Springbrook Farm, on Milord, (105917) 110558; third, Dunhams, on Carnot Jr., 113362; fourth, Lakewood Farm, on Marabout, (105154) 106321; fifth, Chas. P. Quirin, on Barnum II, 110366; sixth, R. W. Hoit, on Alberton, 114794.

Stallion Four Years Old and Under Five—First, Springbrook Farm, on Carvictor, 136718; second, Dunhams, on Grenat II, 130168; third, Chas. P. Quirin, on Dan, 138176; fourth, J. O. Singmaster & Son, on Maplegrove Stoner, 134688; fifth, Frank Keenan & Son, on Primo, 132990; sixth, Lakewood Farm, on Jacobus, 137617.

Stallion Three Years Old and Under Four—First, J. O. Singmaster & Son, on Intend, 145745; second, Dunhams, on Herman, 141380; third, Lakewood Farm, on Lakewood Seducteur, 148252; fourth, Chas. P. Quirin, on Bob, 147906; fifth, J. O. Singmaster & Son, on Maplegrove Noble, 140834.

Stallion Two Years Old and Under Three—First, J. O. Singmaster & Son, on Maplegrove Favori II, 151926; second, Dunhams, on Adjuster, 150841; third, Chas. W. Brown, on Fenelon, 154580; fourth, Dunhams, on Ivanhoe, 154162; fifth, E. P. Hamilton & Sons, on Ernest H., 154044; sixth, W. J. Dawson, on Joli, 156586.

Stallion One Year Old and Under Two—First, Dunhams, on Optat, 157092; second, E. P. Hamilton & Sons, on Alexander; third, J. O. Singmaster & Son, on Jubilee, 157002; fourth, J. O. Singmaster & Son, on Maplegrove King, 158915; fifth, Springbrook Farm, Lord of Springbrook, 153523; sixth, J. O. Singmaster & Son, on Maplegrove Sunrise.

Stallion Foal—First, Clarence E. Peterson, on Premier; second, W. L. Joy, on Maple Drive Laddie; third, S. M. Hague; fourth, Van Auken & Fraser.

Mare Five Years Old and Over—First, Lakewood Farm on Marietta, 119202; second, Chas. W. Brown, on Nellie, 116782; third, Chas. W. Brown, on Maud, 116781; fourth, Chas. P. Quirin, on Blanch, 118696; fifth, Dunhams, on Dorothy, 123691; sixth, Springbrook Farm, on Joctelle, (86531) 91244.

Mare Four Years Old and Under Five—First, Springbrook Farm, on Eleanor, 124439; second, Van Auken & Fraser, on Margot, 135248; third, R. W. Hoit & Son, on Hazel Queen, 123607; fourth, R. W. Hoit & Son, on Amorita, 128082; fifth, Chas. P. Quirin, on Pet, 138177; sixth, Chas. W. Brown, on Beulah B. 123876.

Mare Three Years Old and Under Four—First, Springbrook Farm, on Roquette, 134435; second, Clarence Peterson, on MayBasket, 141793; third, Lakewood Farm, on Venus II, 157659; fourth, R. W. Hoit & Son, on Patricia, 139117; fifth, R. W. Hoit & Son, on Lagitime, 136146; sixth, Chas. W. Brown, on Topsy, 146647.

Mare Two Years Old and Under Three—First, Springbrook Farm, on Jeanette, 149784; second, Rookwood Farm, on Jalap Beauty, 150130; third, Dunhams, on Persida, 147996; fourth, Chas. W. Brown, on Dora, 154586; fifth, Lakewood Farm, on Mary Ann, 156639; sixth, Clarence Peterson, on Komania, 144512.

Mare One Year Old and Under Two—First, Lakewood Farm, on Carlena, 157980; second, Chas. W. Brown, on Huppee, 158717; third, Dunhams, on Linees, 157093; fourth, Hemingway Bros., on Mabel; fifth, J. A. Redman, on Heritage, 161214; sixth, Hemingway Bros., on Queen Charlotte, 159612.

Mare Foal—First, W. J. Dawson, on Jeneva; second, Hemingway Bros., on Zella; third, Lee Bros., on Lagnola, 162002; fourth, S. M. Hague, on ———.

Mare and Foal (50 Per Cent Each)—First, Clarence E. Peterson, on Rosa, 94741, and foal; second, W. L. Joy; third, S. M. Hague, on Logan and foal, 67548; fourth, Hemingway Bros.; fifth, Lee Bros., on Roseland and foal, 78168; sixth, W. J. Dawson, on Ruby and foal, 127317.

Junior Champion Stallion—First, J. O. Singmaster & Son, on Favorite 2nd; second, Dunhams, on Optat.

Senior Champion Stallion—First, J. O. Singmaster & Son, on Lagos; second, Springbrook Farm, on Milord.

Grand Champion Stallion—First, J. O. Singmaster & Son, on Lagos; second, Springbrook Farm, on Milord.

Junior Champion Mare—First, Springbrook Farm, on Jeanette; second, Lakewood Farm, on Carlena.

Senior Champion Mare—First, Lakewood Farm, on Maretta; second, Springbrook Farm, on Roquette.

Grand Champion Mare—First, Springbrook Farm, on Jeanette; second, Lakewood Farm, on Maretta.

Champion Stallion Owned in Iowa—First, J. O. Singmaster & Son, on Lagos; second, J. O. Singmaster & Son, on Favorite 2nd.

Champion Mare Owned in Iowa—First, Lakewood Farm, on Maretta; second, Chas. W. Brown, on Nellie.

Get of Sire, Three Animals, Either Sex—First, J. O. Singmaster; second, Chas. W. Brown; third, Lakewood Farm; fourth, R. W. Hoit & Son; fifth, E. P. Hamilton & Sons; sixth, Chas. P. Quirin.

Produce of Mare, Two Animals, Either Sex—First, Chas. W. Brown; second, Chas. W. Brown; third, Chas. P. Quirin; fourth, R. W. Hoit & Son; fifth, W. J. Dawson; sixth, Lakewood Farm.

Stallion and Three Mares Under Three, Bred by Exhibitor—First, Dunhams; second, Lee Bros.; third, W. J. Dawson.

Stallion and Three Mares, Any Age—First, Springbrook Farm; second, Dunhams; third, Chas. W. Brown; fourth, Lakewood Farm; fifth, Clarence E. Peterson; sixth, R. W. Hoit & Son.

Five Stallions—First, J. O. Singmaster & Son; second, Dunhams; third, Chas. P. Quirin.

INDIVIDUAL BREEDERS' PRIZES.

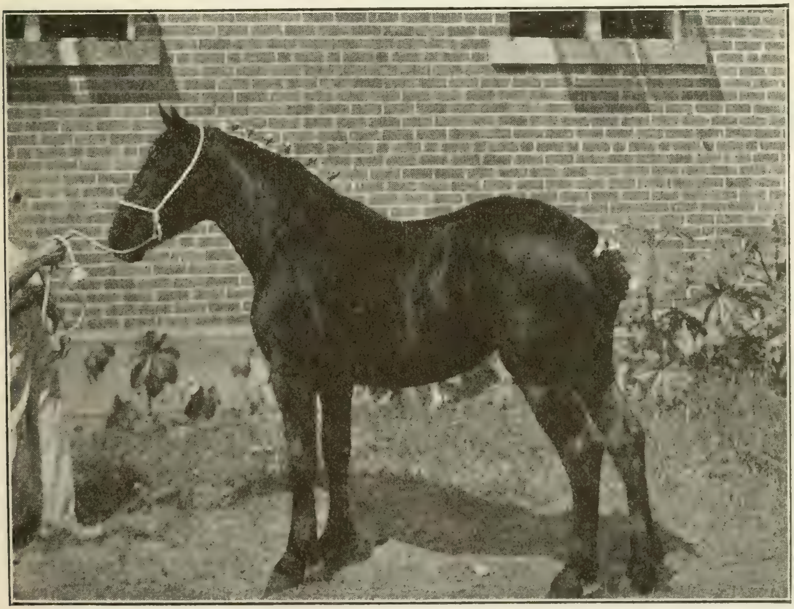
To the Breeder of All First Prize American Bred Animals in Regular Single Classes—Lakewood Farm, on Marietta, 119202; Springbrook Farm, on Carvictor, 136718; Dunhams, on Optat, 157092; J. O. Singmaster & Son, on Lagos, 99093; J. O. Singmaster & Son, on Intend, 145745; J. O. Singmaster & Son, on Maple Grove Favori II, 151926; Springbrook Farm, on Rouquette, 134435; Springbrook Farm, on Eleanor, 124439; Springbrook Farm, on Jeanette, 149784; Lakewood Farm, on Carlena, 157980; Clarence E. Peterson, on Premier.

To the Exhibitor of Animals Winning the Largest Amount in Prizes in the Percheron Classes—J. O. Singmaster & Son.

SPECIAL PRIZES OFFERED BY THE PERCHERON SOCIETY OF AMERICA.

Grand Champion Stallion or Mare Bred by Exhibitor—Trophy—Lakewood Farm, on Maretta.

National Percheron Breeders' Futurity—Stallion—First, Dunhams, on Optat, 157092; second, E. P. Hamilton & Sons, on Alexander; third, J. O. Singmaster & Son, on Jubilee, 157002; fourth, J. O. Singmaster & Son, on Maplegrove King; fifth, Springbrook Farm, on Lord of Springbrook; sixth, J. O. Singmaster & Son, on Maplegrove Lafen; seventh, Lakewood Farm, on Carlone; eighth, E. P. Hamilton & Sons, on General March; ninth, Frank Keenan & Son, on Sans Pariel Jolon; tenth, S. M. Hague, on Rob Roy; eleventh, Clarence E. Peterson, on Kohinor; twelfth, Frank Keenan & Son, on Shenandoah Lagos.



CARLENA.

First Prize Registered Filly Foals, National Percheron Breeders' Futurity. J. B. McMillan, Rock Rapids, Iowa.

National Percheron Breeders' Futurity—Registered Filly Foals, American Bred—First, Lakewood Farm, on Carlena; second, Dunhams, on Linees, 157093; third, Hemingway Bros., on Mable; fourth, J. C. Redman, on Heritage; fifth, Hemingway Bros., on Queen Charlotte; sixth, Lee Bros., on Lagonetts; seventh, R. W. Hoit & Son, on Ethel, 159096; eighth, Chas. Bass & Son, on Caster Bell II; ninth, W. J. Dawson, on Jamina; tenth, Lakewood Farm, on Maud S.; eleventh, R. W. Hoit & Son, on Grace, 159097; twelfth, Clarence E. Peterson.

JEANNETTE.

Grand Champion Percheron Mare. Springbrook Farm, Walkersville, Md.

CLYDESDALE.

Exhibitors—G. Andrews & Son, Cambridge, Neb.; F. L. Anderson, Ross; June H. Brown, Stuart; James S. Carse & Co., Carson; J. W. Hillman, Dana; Iowa State College, Ames; J. C. Jarard, New Sharon; W. M. Jackson, New Sharon; Lakewood Farm, Rock Rapids; Longwood Farm, Center Harbor, N. H.; Harry Nailor, Audubon; John J. Nailor, Audubon; Ernest Pfeiffer, Odebolt; Wm. F. Scott, Paullina; J. G. Sage & Son, Gilman; A. G. Soderberg, Osco, Ill.; South Bros., Orion, Ill; L. C. Tice, New Sharon; Williams & Brand, Kanawha.

Judge................................Andrew McFarlane, Palo, Iowa

Stallion Five Years Old and Over—First, J. W. Hillman, on Royal Knot, (17471) 18126; second, G. Andrews & Son, on King's Topaz, (18796) 20094; third, J. G. Sage & Son, on Afton Chief, 17231; fourth, A. G. Soderberg, on Come Again, 16920.

Stallion Fours Years Old and Under Five—First, Longwood Farm, on Baron Cedric, 20106; second, A. G. Soderberg, on Pride of Enterprise Farms, 19933; third, L. C. Tice, on Pride, 20002.

Stallion Three Years Old and Under Four—First, Longwood Farm, on Victor Favourite, 20589; second, L. C. Tice, on Sultan's Pride, 20542; third, Longwood Farm, on Longwood's Herald; fourth, A. G. Soderberg, on Hopes Prince, 21220; fifth, Ernest Pfeiffer, on Prince, 21097.

Stallion Two Years Old and Under Three—First, Iowa State College on Peer's Stamp, 21254; second, Wm. F. Scott, on Cedric Knight, 21227; third, Longwood Farm, on Longwood Criterion; fourth, A. G. Soderberg, on Royal Prince, 21221; fifth, Lakewood Farm, on Avon's Pride, 20886.

Stallion Foal—First, G. Andrews & Son, on Topaz Again; second, L. C. Tice, on Dashwood.

Mare Five Years Old and Over—First, Longwood Farm, on Maude Muller, 16131; second, W. M. Jackson, on Princess Favorite, 17901; third, A. G. Soderberg, on Hope's Princess, 21219; fourth, Wm. F. Scott, on Victoria Luise, 17674; fifth, L. C. Tice, on Kate Gordon, (27799) 16228.

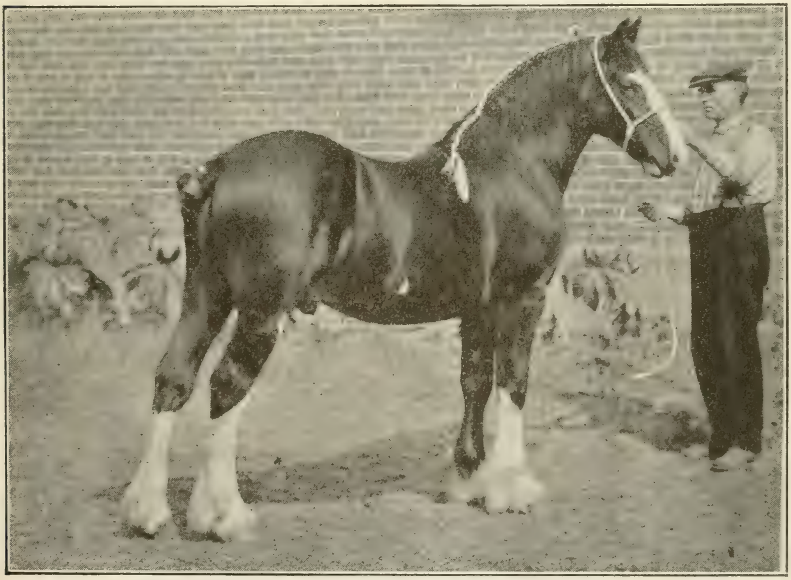
Mare Four Years Old and Under Five—First, L. C. Tice, on Bonita, 19895; second, Longwood Farm, on Winsome Favorite, 17662; third, J. C. Jarard & Sons, on Lady Graceful, 19870; fourth, A. G. Soderberg, on Pet Darling, 19957; fifth, J. W. Hillman, on Wayside Beauty, 19971.

Mare Three Years Old and Under Four—First, F. L. Anderson, on Cedrick Baroness, 20649; second, Iowa State College, on Iolantha, 20596; third, L. C. Tice, on Sultan's Queen, 20543; fourth, J. C. Jarard & Sons, on Helen Everard, 20613; fifth, John J. Nailor, on Troopers Beauty, 20286.

Mare Two Years Old and Under Three—First, Iowa State College, on Peer's Lady, 21147; second, Longwood Farm, on Liberty Bell, 20832; third, L. C. Tice, on Delightful May, 21080; fourth, Wm. F. Scott, on Victoria Jean, 20883; fifth, G. Andrews & Son, on Bright Topaz, 21124.

Mare Foal—First, F. L. Anderson, on Dorothy's Jean; second, W. M. Jackson, on Theda Peer; third, Wm. F. Scott, on Silver Leaf; fourth, G. Andrews & Son, on Minnie Topaz.

Mare and Foal (50 Per Cent Each)—First, F. L. Anderson, on Dorothy Vernon and foal; second, W. M. Jackson on Princess Favorite and foal, 17901; third, Wm. F. Scott, on Victoria Luise and foal, 17674; fourth, G. Andrews & Son, on Roberta and foal, 19394; fifth, L. C. Tice, on Kate Gordon, (27799) 16228.



CHARMING ARCHER.

Grand Champion Clydesdale Stallion. J. G. Sage & Son, Gilman, Iowa.

Junior Champion Stallion—First, Sage & Son, on Charming Archer; second, Iowa State College, on Peers Stamp, 21254.

Senior Champion Stallion—First, J. W. Hillman, on Royal Knot, 18126; second, Longwood Farm, on Victor Favourite, 20589.

Grand Champion Stallion—First, Sage & Son, on Charming Archer; second, J. W. Hillman, on Royal Knot, 18126.

Junior Champion Mare—First, Iowa State College, on Peer's Lady, 21147; second, F. L. Anderson, on Dorothy's Jean.

Senior Champion Mare—First, F. L. Anderson, on Cedric Baroness, 20649; second, Longwood Farm, on Maude Muller, 16131.

Grand Champion Mare—First, Iowa State College, on Peer's Lady, 21147; second, F. L. Anderson, on Cedric Baroness, 20649.

Champion Stallion Owned in Iowa—First, Sage & Son, on Charming Archer; second, J. W. Hillman, on Royal Knot, 18126.

Champion Mare Owned in Iowa—First, Iowa State College, on Peer's Lady, 21147; second, F. L. Anderson, on Cedric Baroness, 20649.

Get of Sire, Three Animals, Either Sex—First, L. C. Tice; second, A. G. Soderberg; third, Longwood Farm; fourth, G. Andrews & Son; fifth, A. G. Soderberg.

Produce of Mare, Two Animals, Either Sex—First, A. G. Soderberg; second, Longwood Farm; third, Wm. F. Scott; fourth, G. Andrews & Son; fifth, June H. Brown.

Stallion and Three Mares Under Three, Bred by Exhibitor—First, L. C. Tice; second, G. Andrews & Son; third, Longwood Farm; fourth, Wm. F. Scott; fifth, June H. Brown.

Stallion and Three Mares, Any Age—First, L. C. Tice; second, Longwood Farm; third, A. G. Soderberg; fourth, J. G. Sage & Sons; fifth, Wm. F. Scott.

Five Stallions—First, A. G. Soderberg; second, L. C. Tice.

National Clydesdale Breeders' Futurity—Filly Foals—First, G. Andrews & Son, on Shy An Topaz; second, L. C. Tice, on Dorothy Peer; third, A. G. Soderberg, on Hazel; fourth, J. G. Sage & Sons, on Lou Dillon 2d; fifth, L. C. Tice, on Pansy's Pride; sixth, L. C. Tice, on Pet Pride; seventh, Longwood Farm, on Longwood Nellie; eighth, G. Andrews & Son on Fair Nell.

National Clydesdale Breeders' Futurity—Stallions—First, J. G. Sage & Sons, on Charming Archer, 21247; second, Wm. M. Jackson, on Prairie Chief, 21680; third, A. G. Soderberg, on Baron Peer; fourth, F. L. Anderson, on Brilliant Craig; fifth, June H. Brown, on Peer Jr., 21256; sixth, A. G. Soderberg, on Baron Adam; seventh, J. W. Hillman, on Bonnies' Pride, 21544; eighth, Lakewood Farm, on Black Prince.

Premier Breeder's Prize—Breeder winning largest amount in prizes in the Clydesdale classes, W. L. Hixon Estate, Marengo, Iowa.

Individual Breeder's Prize—Breeder of all first prize American bred animals in regular single classes, G. Andrews & Son, on Topsy Again; J. G. Sage & Son, on Charming Archer; L. C. Tice, on Bonita, 19895; F. L. Anderson, on Cedric Baroness, 20649; Jas. F. Gissebal, on Afton Chief, 17231; W. L. Hixon Est., on Pier's Stamp, 21254; W. L. Hixon Est. on Pier's Lady, 21147.

Exhibitor's Prize—Exhibitor of animals winning the largest amount in prizes in the Clydesdale classes, L. L. Sanborn, Longwood Farm.

ENGLISH SHIRES.

Exhibitors—Fogleman Bros., Callendar; Hildreth & Howard, Ankeny; Thos. Kiddoo & Sons, Joy, Ill.; J. C. Moore, Rushville, Ill.; H. J. Phillips, West Liberty; Albert Rowe, Letts; J. F. Seiberling, Mitchellville; Tom Skola, Slater; M. H. Smiley, Dallas Center; Smith Bros., Altoona; Truman's Pioneer Stud Farm, Bushnell, Ill.; C. S. Waltz, Creston; Westbrook Stock Farm, Letts.

Judge.................................A. Latimer Wilson, Creston

Stallion Five Years Old and Over—First, Fogelman Bros., on Tatton Merry Boy, 14035; second, Truman's Pioneer Stud Farm, on Lockinge Sailor, 16406; third, Thos. Kiddoo & Sons, on Royal Fame, 15438.

Stallion Four Years Old and Under Five—First, Albert Rowe, on Edgewood Charmer, 17180; second, Hildreth & Howard, on Bryan's Boro Blusterer, 18136; third, M. H. Smiley, on Edward Kersey, 17277; fourth, Thos. Kiddoo & Sons, on Osco King, 17290.

Stallion Three Years Old and Under Four—First, Truman's Pioneer Stud Farm, on Admiral Wynee, 17813; second, Truman's Pioneer Stud Farm, on William's Dan Patch, 17636.

Stallion Two Years Old and Under Three—First, Truman's Pioneer Stud Farm, on Hawthorn Advocate, 18030; second, J. F. Seiberling, on Brookwood Prince, 18513; third, Truman's Pioneer Stud Farm, on Wendel's Surprise, 18319; fourth, Thos. Kiddoo & Sons, on Pedro, 18333; fifth, Smith Bros., on Lucky Strike, 18490.

Stallion Foal—First, C. S. Waltz, on Minstrel; second, Smith Bros., on Revolution; third, C. S. Waltz, on Harlaston; fourth, Hildreth & Howard; fifth, Hildreth & Howard, on Severn's Duke. ,

Mare Five Years Old and Over—First, Thos. Kiddoo & Sons, on Gwendolin, 15300; second, Albert Rowe, on Beeby Judy, (56018) 15402; third, Fogleman Bros., on Boro Vanity, (66124) 13521; fourth, Smith Bros. on Silk Stocking, 15554; fifth, Hildreth & Howard, on Mahomet Princess, 15681.

Mare Four Years Old and Under Five—First, Truman's Pioneer Stud Farm, on Elder Mary II (87114) 17340; second, Smith Bros., on Altoona Princess II, 17396; third, C. S. Waltz, on Beulah Daisy; fourth, C. S. Waltz, on Eulah Starlight.

Mare Three Years Old and Under Four—First, Truman's Pioneer Stud Farm, on Lockinge Bonney, 17577; second, Tom Skola, on Beauty Rex, 17789; third, Hildreth & Howard, on Gene, 17994; fourth, Hildreth & Howard, on Velda, 17996; fifth, Alvert Rowe, on Hawthorn Diamond, 17419.

Mare Two Years Old and Under Three—First, Tom Skola, on Daisy Dell, 18081 second, Truman's Pioneer Stud Farm, on William's Flower IX, 18929; third, Hildreth & Howard, on Glady's Fleet, 18465; fourth, Tom Skola, on Grove II, 18595; fifth, Hildreth & Howard, on Glorious Flash, 18463.

Mare Foal—First, Hildreth & Howard, on Severn's Easter Eve; second, Thos. Kiddoo & Son; third, Smith Bros., on Maid's Emblem; fourth, Fogleman Bros., on Severn Empress; fifth, Hildreth & Howard, on Royal Belle.

Mare and Foal (50 Per Cent Each)—First, Hildreth & Howard, on Henle Easter Eve and foal, (51268) 9003; second, C. S. Waltz, on Beulah Daisy and foal; third, Hildreth & Howard, on Royal Lily and foal, 16425; fourth, Smith Bros., on Altoona Belle II and foal, 14689; fifth, Thos. Kiddoo & Sons, on Gwendolin and foal, 15300.

Junior Champion Stallion—First, Truman's Pioneer Stud Farm, on Hawthorne Advocate second, C. L. Waltz, on Minstrel.

Senior Champion Stallion—First, Albert Rowe, on Edgewood Charmer; second, Truman's Pioneer Stud Farm, on Admiral Wynne.

Grand Champion Stallion—First, Albert Rowe, on Edgewood Charmer; second, Truman's Pioneer Stud Farm on Hawthorne Advocate.

Junior Champion Mare—First, Tom Skola, on Daisy Dell; second, Truman's Pioneer Stud Farm, on Bushnell Starlight.

Senior Champion Mare—First, Truman's Pioneer Stud Farm, on Lockinge Bonnie; second, Truman's Pioneer Stud Farm, on Elder Mary.

Grand Champion Mare—First, Truman's Pioneer Stud Farm, on Lockinge Bonnie; second, Tom Skola, on Daisy Dell.

Champion Stallion Owned in Iowa—First, Albert Rowe, on Edgewood Charmer; second, Hildreth & Howard, on Bryan's Boro Blusterer.

Champion Mare Owned in Iowa—First, Tom Skola, on Daisy Dell; second, Tom Skola, on Beauty Rex.

Get of Sire, Three Animals, Either Sex—First, Truman's Pioneer Stud Farm; second, Tom Skola; third, Smith Bros.; fourth, Thos. Kiddoo & Sons; fifth, Albert Rowe.

Produce of Mare, Two Animals, Either Sex—First, Tom Skola; second, Smith Bros.; third, Thos. Kiddoo & Sons; fourth, Smith Bros; fifth, Truman's Pioneer Stud Farm.

Stallion and Three Mares Under Three, Bred by Exhibitor—First, Smith Bros.; second, Thos. Kiddoo & Sons.

Stallion and Three Mares, Any Age—First, Truman's Stud Farm; second, Hildreth & Howard; third, Tom Skola; fourth, Hildreth & Howard; fifth, Albert Rowe.

Five Stallions—First, Truman's Stud Farm; second, Westbrook Stock Farm.

OFFERED BY THE SHIRE HORSE SOCIETY OF GREAT BRITAIN AND IRELAND.

Grade Mares or Geldings Sired by Registered Shire Horses—First, Truman's Pioneer Stud Farm, on Hobson; second, Truman's Pioneer Stud Farm, on Townsend; third, C. S. Waltz, on Bessie May.

Premier Breeder's Prize—Breeder of animals winning the largest amount in prizes in the Shire classes, Smith Bros., Altoona, Iowa.

Individual Breeder's Prize—Breeder of all first American bred animals in regular single classes, Thos. Kiddoo & Sons, on Gwendolin, 15300; Smith Bros., on Altoona Princess II, 17396; C. S. Waltz, on Minstrel; L. N. & O. B. Sizer, Fisher, Ill., on Tatton Merry Boy, 14035; W. J. Lynch, Tonica, Ill., on Admiral Wynne, 17813; Samuel Insull, Hawthorne, Ill., on Hawthorne Advocate, 18030; C. A. Lindquist, Essex, Iowa, on Daisy Dell, 18081; Geo. Schaffenacker, Kenney, Ill. on Lockridge Bonny, 17577.

Exhibitor's Prize—Exhibitor of animals winning the largest amount in prizes in the Shire classes, Truman's Pioneer Stud Farm, Bushnell, Ill.

National Shire Breeder's Futurity—Filly—First, Truman's Pioneer Stud Farm, on Bushnell Starlight; second, J. S. Hildreth, on Wrydelands Flossie; third, Smith Bros., on Golden Sunbeam; fourth, Thos. Kiddoo & Son, on Rowena Royal Maid, 18763; fifth, Albert Rowe, on Lettsville Beauty; sixth, J. L. Howard, on Ankeny Pearl; seventh, Smith Bros., on Come Again; eighth, Thos. Kiddoo & Son, on Edgewood Ruth.

National Shire Breeder's Futurity—Stallion—First, Westbrook Stock Farm, on Westbrook Boro; second, Truman's Pioneer Stud Farm, on Truman's Blusterer II; third, Tom Skola, on Tatton King 18772; fourth, Westbrook Stock Farm, on King David; fifth, Tom Skola, on Slater Echo, 18524; sixth, Albert Rowe, on Rowe Billy Blusterer.

BELGIANS.

EXHIBITORS—J. S. Chesney, Keota; Crownover & Brandhorst, Hudson; W. C. Estes, Packwood; C. G. Good, Ogden; P. W. Heil, Garrison; Dr. W. A. Hamilton; Paullina; Chas. Irvine, Ankeny; Iowa State College, Ames; C. E. Jones, Livermore; Henry Lefebure's Sons Co., Fairfax; Lakewood Farm, Rock Rapids; John M. Moon, Correctionville; Simon Peterson, Ogden; J. C. Ritchie, Stratford.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa

Stallion Five Years Old and Over—First, Henry Lefebure's Sons Co., on Duke of Elmwood, 9957; second, C. E. Jones, on Ergot, 7611; third, J. C. Ritchie, on Lucifer de Maeter, 7276.

Stallion Four Years Old and Under Five—First, Chas. Irvine, on Rowdy II, 10570; second, C. G. Good, on Monarque, 9567; third, W. C. Estes, on Black Bruno, 10342.

IRVINEDALE FAVETTE AND ROWDY.

Grand Champion Belgian Mare and Stallion. Chas. Irvine, Ankeny, Iowa.

Stallion Three Years Old and Under Four—First, Chas. Irvine on Rowdy, 11130; second, C. E. Jones, on Marcus, 11058; third, C. G. Good, on Farceur Pal, 11321; fourth, J. S. Chesney on Jean Bart III, 10942; fifth, John M. Moon, on Lafleur, 11218.

Stallion Two Years Old and Under Three—First, Chas. Irvine, on Liberty Chief, 11490; second, J. C. Ritchie, on Irvindale de Bree Eyck, 11292; third, Dr. W. A. Hamilton, on Albert, 11723; fourth, Lakewood Farm, on Roscoe, 11289; fifth, P. W. Heil, on Colonel Lafleur, 11566.

Stallion Foal—First, Dr. W. A. Hamilton, on Indigenes Sensation; second, Henry Lefebure's Sons Co., on Lefebure's Mon Gros 20th; third, C. E. Jones, on Duke; fourth, John M. Moon, on Long Tom; fifth, Henry Lefebure's Sons Co., on Mon Heur.

Mare Five Years Old and Over—First, C. E. Jones, on Paramount Lola, 4987; second, Dr. W. A. Hamilton, on Janet Brillante, 4349; third, Chas. Irvine, on Cora, 3419.

Mare Four Years Old and Under Five—First, C. G. Good, on Paramount Lulu, 6014; second, C. G. Good, on Oakdale Girl, 6201; third, J. C. Richie, on Alma, 6061; fourth Chas. Irvine on Burd, 5915; fifth, John M. Moon, on Sweet Maid, 5551.

Mare Three Years Old and Under Four—First, Chas. Irvine on Ivondale Favette, 6674; second, Henry Lefebure's Sons Co., on Fairfax Pudge, 4360; third, Chas. Irvine, on Irvinedale Jeanette, 6678; fourth, Iowa State College, on Ginger, 8302; fifth, J. C. Ritchie on Bonnie, 6553.

Mare Two Years Old and Under Three—First J. C. Ritchie, on Janette de Maeter, 7056; second, C. G. Good, on Blaivette II, 7750; third, Simon Peterson, on Echo Dale Charlotte; fourth, Iowa State College, on College Dream, 6762; fifth, Dr. W. A. Hamilton, on Beatrice, 7687.

Mare Foal—First, Chas. Irvine on Irvinedale Alfredette; second, Henry Lefebure's Sons Co., on Lefebure's Ma Grosse 20th; third, J. C. Ritchie, on Hazel; fourth, C. E. Jones, on Belle.

Mare and Foal (50 Per Cent Each)—First, Chas. Irvine, on Salome and foal, 4871; second, Henry Lefebure's Sons Co., on Homerina and foal, 4360; third, J. C. Ritchie, on Alma and foal, 6061; fourth C. E. Jones, on Laura and foal; fifth, W. C. Estes, on Bay Beauty and foal, 3379.

Junior Champion Stallion—First, Chas. Irvine, on Liberty Chief; second, John C. Ritchie, on Irvinedale de Bree Eyck.

Senior Champion Stallion—First, Chas. Irvine, on Rowdy; second, Henry Lefebure's Sons Co., on Duke of Elmwood.

Grand Champion Stallion—First, Chas. Irvine, on Rowdy; second, Chas. Irvine, on Liberty Chief.

Junior Champion Mare—First, C. G. Good, on Farceuretta; second, C. G. Good, on Farcetta.

Senior Champion Mare—First, Chas. Irvine, on Irvinedale Favette; second, C. G. Good, in Paramount Lulu.

Grand Champion Mare—First, Chas. Irvine, on Irvinedale Favette; second, C. G. Good, on Farceuretta.

Champion Stallion Owned in Iowa—First, Chas. Irvine, on Rowdy; second, Chas. Irvine, on Liberty Chief.

Champion Mare Owned in Iowa—First, Chas. Irvine, on Irvinedale Favette; second, C. G. Good, on Farceuretta.

Get of Sire, Three Animals, Either Sex—First, C. G. Good; second, Chas. Irvine; third, C. G. Good; fourth, J. C. Ritchie; fifth, C. G. Good.

Produce of Mare, Two Animals, Either Sex—First, C. G. Good; second, Chas. Irvine; third, C. G. Good; fourth, Chas. Irvine; fifth, C. G. Good.

Stallion and Three Mares Under Three, Bred by Exhibitor—First, Chas. Irvine second, J. C. Ritchie.

Stallion and Three Mares, Any Age—First, Chas. Irvine; second, C. G. Good; third, J. C. Ritchie; fourth C. E. Jones.

Five Stallions—First Chas. Irvine.

BREEDER'S PRIZES.

Premier Breeder's Prize—Breeder of animals winning the largest amount in prizes in the Belgian classes, Chas. Irvine.

Individual Breeder's Prize—Breeder of first prize American bred animals in regular single classes, J. C. Ritchie, on Janette de Maeter, 7056; Chas. Irvine, on Irvinedale Favette, 6674; Chas. Irvine, on Irvinedale Alfredetta; Dr. W. A. Hamilton, on Indezenes Sensation, Rasson Bros., Elmwood, Ill., on Duke of Elmwood, 9957; Edward Ball, Scribner, Nebr., on Rowdy II, 10570; O. A. Kessler, Riverside, on Rowdy, 11130; J. J. Bonesetter, Corwith, on Liberty Chief, 11490; Crownover & Brandhorst, Hudson, on Paramount Lola, 4987; Crownover & Brandhorst, on Paramount Lulu, 6014.

Exhibitor's Prize—Exhibitor of animals winning the largest amount in prizes in the Belgian classes, Chas. Irvine.

SPECIAL PRIZES OFFERED BY THE AMERICAN ASSOCIATION OF IMPORTERS AND BREEDERS OF BELGIAN DRAFT HORSES.

Stallion Five Years Old and Over—First, Henry Lefebure's Sons Co., on Duke of Elmwood, 9957; second, C. E. Jones, on Ergot, 7611; third, J. C. Ritchie, on Lucifer de Maeter, 7276.

Stallion Four Years Old and Under Five—First, Chas. Irvine, on Rowdy II, 10570; second, C. G. Good, on Monarque, 9567; third, W. C. Estes, on Black Bruno, 10342.

Stallion Three Years Old and Under Four—First, Chas. Irvine, on Rowdy, 11130; second, C. E. Jones, on Marcus, 11058; third, C. G. Good, on Farclour Pal, 11321; fourth, J. S. Chesney on Jean Bart III, 10942; fifth, John M. Moon, on Sofleur, 11718.

Stallion Two Years Old and Under Three—First, Chas. Irvine, on Liberty Chief, 11490; second, J. C. Ritchie, on Irvinedale de Bree Eyck, 11292; third, Dr. W. A. Hamilton, on Albert, 11723; fourth, Lakewood Farm, on Roscoe, 11289; fifth, P. W. Heil, on Colonel Lafleur, 11566.

Mare Five Years Old and Over—First, C. E. Jones, on Paramount Lola, 4987; second, Dr. W. A. Hamilton, on Janet Brillante, 4349; third, Chas. Irvine, on Cora, 3419.

Mare Four Years Old and Under Five—First, C. G. Good, on Paramount Lulu, 6014; second, C. G. Good, on Oakdale Girl, 6201; third, J. C. Ritchie, on Alma 6061; fourth Chas. Irvine on Burd, 5915.

Mare Three Years Old and Under Four—First, Chas. Irvine, on Irvinedale Favette, 6674; second, Henry Lefebure's Sons Co., on Fairfax Pudge, 4360; third, Chas. Irvine, on Irvinedale Jeanette 6678; fourth, Iowa State Collgee, on Ginger, 8302; fifth, J. C. Ritchie, on Bonnie, 6553.

Mare Two Years Old and Under Three—First, J. C. Ritchie, on Janette de Maeter, 7056; second, C. G. Good, on Blaivette II, 7750; third, Simon Peterson, on Echo Dale Charlotte; fourth, Iowa State College, on College Dream, 6762; fifth, Dr. W. A. Hamilton, on Beatrice 7687.

Junior Champion Stallion—First, Chas. Irvine, on Liberty Chief; second, J. C. Ritchie, on Irvinedale de Bree Eyck.

Senior Champion Stallion—First, Chas. Irvine, on Rowdy; second, Henry Lefebure's Sons Co., on Duke of Elmwood.

Grand Champion Stallion—First, Chas. Irvine, on Rowdy; second, Chas. Irvine, on Liberty Chief.

Junior Champion Mare—First, C. G. Good, on Farceuretta; second, C. G. Good, on Farcetta.

Senior Champion Mare—First, Chas. Irvine, on Irvinedale Favette; second, C. G. Good, on Paramount Lulu.

Grand Champion Mare—First, Chas. Irvine, on Irvinedale Favette; second, C. G. Good, on Farceuretta.

Five Stallions, Property of One Exhibitor—Chas. Irvine.

National Belgian Breeder's Futurity—Stallions—First, Chas. Irvine, on Irvinedale Jumbo, 11996; second, Henry Lefebure's Sons Co., on Mon Gros 3d; third, C. G. Good & Son, on King Farceur; fourth, C. E. Jones on Beau de Ergot; fifth, Henry Lefebure's Sons Co., on Lefebure's Mon Gros II; sixth, Chas. Irvine, on Irvinedale Jupiter, 11997; seventh, Henry Lefebure's Sons Co., on Lefebure's Mon Gros.; eighth, Lakewood Farm, on Damp, 12128; ninth, John M. Moon, on Farceur Boy; tenth, C. E. Jones, on Forton de Ergot; eleventh, Simon Peterson, on Echo Dale Farceur.

National Belgian Breeder's Futurity—Filly Foals—First C. G. Good & Son, on Farceuretta; second, C. G. Good & Son, on Farcetta; third, Chas. Irvine, on Irvinedale Suzette, 8342; fourth, Chas. Irvine, on Irvinedale du Cuerne, 8091; fifth, Dr. W. A. Hamilton & Son on Perfection; sixth, Chas. Irvine, on Irvinedale Salome, 8088; seventh, Simon Peterson, on Echo Dale Moaidie; eighth, Henry Lefebure's Sons Co., on Lefebure's Ma Grosse 1st; ninth, Henry Lefebure's Sons Co., on Lefebure's Ma Grosse II; tenth, Lakewood Farm, on Miss Dampierre, 8328; eleventh, Dr. W. A. Hamilton & Son, on Dona's Pride; twelfth, Henry Lefebure's Sons Co., on Lefebure's May Grosse III; thirteenth, John M. Moon, on Daisy; fourteenth, Lakewood Farm, on Lady Lakewood II.

DRAFT GELDINGS AND MARES.

Exhibitors—F. L. Anderson, Ross; F. Berkey & Son, Ankeny; Chas. Bass & Son, Rose Hill; W. C. Estes, Packwood; C. G. Good, Ogden; George Huston, Waukee; Hildreth & Howard, Ankeny; S. M. Hague, Waukee; R. W. Hart &

Son, Beacon; Chas. Irvine, Ankeny; J. C. Jarard & Sons, New Sharon; Lee Bros., Mitchellville; Lakewood Farm, Rock Rapids; J. C. Moore, Rushville, Ill.; Ed Parmenter, Ankeny; M. C. Peters Mill Co., Omaha, Neb.; J. C. Ritchie, Stratford; A. G. Soderberg, Osco, Ill.; Smith Bros., Altoona; Springbrook Farm, Walkerville, Md.; J. W. Thompson, Ankeny; Truman Pioneer Stud Farm, Bushnell, Ill.; L. C. Tice, New Sharon; C. S. Waltz, Creston.

JUDGE................................ROBERT G. OGILVIE, Chicago, Ill.

Gelding or Mare Four Years Old or Over—First, J. C. Jarard & Sons, on Charley; second, Chas. Bass & Son, on Bob; third, George Huston, on Molly E; fourth, George Huston, on Baby B; fifth, J. C. Jarard & Sons, on Advance.

Gelding or Mare Three Years Old and Under Four—J. C. Ritchie, on Pearl.

Gelding or Mare Two Years Old and Under Three—First, C. S. Waltz, on Bessie May; second, W. C. Estes, on Dandy; third, Lee Bros., on Nell; fourth, J. C. Ritchie, on Blue Belle.

Gelding or Mare One Year Old and Under Two—First, J. C. Ritchie, on Flora.

Horse or Filly Foal—First, Geo. Huston, on Beauty; second, J. W. Thompson, on Dan; third, Lee Bros., on Dandy; fourth J. W. Thompson, on Gene.

Farmer's Team; Team to Count 75 Per Cent; Grooming, Harness and Manners 25 Per Cent—First, C. W. Brown; second, Chas. Irvine, on Lisla and Soline; third, L. C. Tice, on Molly and May; fourth J. C. Jarard & Sons; fifth Smith Bros.

Gelding or Mare Three Years Old or Over—First, M. C. Peters Mill Co., on Prince George; second, M. C. Peters Mill Co., on Prince Frederick; third, Truman's Pioneer Stud Farm, on Hengist; fourth, Springbrook Farm; fifth, Springbrook Farm.

Draft Team in Harness—First, M. C. Peters Mill Co.; second, Truman's Pioneer Stud Farm; third, Springbrook Farm.

Champion Gelding or Mare—First, J. C. Jarard & Son, on Charley; second, C. S. Waltz, on Bessie May.

Four Horse Team—Springbrook Farm.

Six Horse Team—Springbrook Farm.

Special Prize—Best gelding bred in Iowa, J. C. Jarard & Son, on Charley.

Stable Manager's Prize—Managers of stables winning the greatest number of ribbons, either blue, red, white or pink in draft horse division—First, Lakewood Farm; second, Truman's Pioneer Stud Farm; third, Chas. Irvine; fourth, L. C. Tice.

Best Stable Decoration, Neatest and Most Attractive Draft Horse Exhibit—First, Springbrook Farm; second, Truman's Pioneer Stud Farm; third, R. W. Hoit & Son; fourth, Lakewood Farm.

ROADSTERS.

EXHIBITORS—H. S. Burnham, Colorado Springs, Colo.; Thos. Bass, Mexico, Mo.; Miss Alberta Black, Jacksonville, Ill.; Loula Long Combs, Lee's Summit, Mo.; A. L. Champlin, Ames; H. C. Downing, Des Moines; Graceland Farm, Greenwood, Mo.; Griffin & Robinson, Riverside; C. T. Hall, Carthage, Mo.; R. H. Lewis, Dallas, Texas; Della L. Lemon, Winnipeg, Canada; James McDaniel, Jacksonville, Ill.; J. J. Manbeck, Des Moines; I. Ross Thompson & Clyde Hull, Des Moines; E. S. Van Sant & B. D. Pemberton, Chicago, Ill.; A. E. Warren, Des Moines; Seth Way & Son, Oskaloosa; Williams & Ellington, Buffalo, Ill.

JUDGES.......................... { E. A. TROWBRIDGE, Columbia, Mo.
R. P. STERICKER, Chicago, Ill.

Stallion, Mare or Gelding—First, Williams & Ellington, on Lila Allen; second, Della L. Lemon, on Tin Lizzie; third, Graceland Farm, on Jane Boyd; fourth, Williams & Ellington on Amilda Queen.

Pair Stallions, Mares or Geldings—First, Williams & Ellington, on Amilda Queen & Lila Allen; second, Graceland Farm, on Jane Bogel & Dan Her; third, Della L. Lemon, on Tin Lizzie & Bindare; fourth, Williams & Ellington, on Bondre B. & Mate Harry.

Standard Bred Stallions With Record of 2:30 or Better Shown in Harness—First, Williams & Ellington, on Bondre B.

RUNABOUTS.

EXHIBITORS—Thomas Bass, Mexico, Mo.; H. S. Burnham, Colorado Springs, Colo.; A. L. Champlin, Ames; Graceland Farm, Greenwood, Mo.; Griffin & Robinson, Riverside; R. H. Lewis, Dallas, Texas; Della L. Lemon, Winnipeg, Canada; James McDaniel, Jacksonville, Ill.; James Stineshauser & Bass, Omaha, Neb.; A. E. Warren, Des Moines; Williams & Ellington, Buffalo, Ill.; I. M. Winslow, Winnipeg, Canada; Loula Long Combs, Lee's Summit, Mo.

JUDGES........................ E. A. TROWBRIDGE, Columbia, Mo.
R. P. STERICKER, Chicago, Ill.

Stallion, Mare or Gelding—First, Loula Long Combs, on Exposition; second, A. L. Champlin, on Ardimersay Lottery; third, I. M. Winslow, on Perfect Dream; fourth, Graceland Farm on Graceland Boy.

Pair Stallions Mares or Geldings—First, I. M. Winslow, on Shawhill Boy and Perfect Dream; second, Della L. Lemon, on Tin Lizzie and Bindare; third, A. L. Champlin, on Pactolus Prince and Mate.

LADIES' TURNOUT.

EXHIBITORS—Miss Alberta Black, Jacksonville, Ill.; H. S. Burnham, Colorado Springs, Colo.; A. L. Champlin, Ames; Mrs. Jackson K. Dering, Lake Villa, Ill.; Earl M. Dixon, New Boston, Ill.; Graceland Farm, Greenwood, Mo.; Griffin & Robinson, Riverside; R. H. Lewis, Dallas, Texas; Della L. Lemon, Winnipeg, Canada; I. M. Winslow, Winnipeg, Canada; Van Sant & Pemberton, Chicago, Ill.

JUDGES........................ E. A. TROWBRIDGE, Columbia, Mo.
R. P. STERICKER, Chicago, Ill.

Single Mare or Gelding—First, Della L. Lemon, on Merry Maid; second, I. M. Winslow, on Shawhill Boy; third, Van Sant & Pemberton, on Froncine Larimore; fourth, Della L. Lemon, on England's Pride.

Pair Mare or Geldings or Mare and Gelding—First, I. M. Winslow, on Shawhill Boy and Perfect Dream; second, Della L. Lemon, on England's Pride and Radiant; third, A. L. Champlin, on Lady Greenhill and Mate; fourth, A. L. Champlin, on Highball and Mate Jess.

HIGH STEPPERS AND PARK HORSES.

EXHIBITORS—A. L. Champlin, Ames; Mrs. Jackson K. Dering, Lake Villa, Ill.; Earl M. Dixon, New Boston, Ill.; Griffin & Robinson, Riverside; Della L. Lemon, Winnipeg, Canada; Iowa State College, Ames; Williams & Ellington, Buffalo, Ill.; I. M. Winslow, Winnipeg, Canada; Van Sant & Pemberton, Chicago, Ill.

JUDGES........................ E. A. TROWBRIDGE, Columbia, Mo.
R. P. STERICKER, Chicago, Ill.

Stallion, Mare or Gelding, 15 to 15-2—First, Della L. Lemon, on England's Pride; second, Van Sant & Pemberton, on Froncine Larimore; third, Della L. Lemon, on Radiant; fourth, I. M. Winslow, on Shawhill Boy.

Stallion, Mare or Gelding, 15-2 and Over—First, I. M. Winslow, on Deanston Helen; second, Della L. Lemon, on Merry Maid; third, I. M. Winslow, on Harveston Nell; fourth, Della L. Lemon, on Le Roi.

Pair Stallions, Mares or Geldings, 15 to 15-2—First, Della L. Lemon, on England's Pride and Radiant; second, I. M. Winslow, on Shawhill Boy and Perfect Dream; third, A. L. Champlin, on Lucky Boy and Pactolus Prince; fourth, Earl M. Dixon, on Polly Langdon and Leading Lady.

Pair Stallions, Mares or Geldings, 15-2 or Over—First, Della L. Lemon, on Merry Maid and Le Roi; second, I. M. Winslow, on Deanston Helen and Mate; third, A. L. Champlin, on Highball and Mate; fourth, A. L. Champlin, on May Maiden and Mate.

Stallion, Mare or Gelding, Any Height, Horse Alone to Be Considered—First, Mrs. J. K. Dering, on Nelson Primrose; second, Della L. Lemon on England's Pride; third, Della L. Lemon, on Merry Maid; fourth, I. M. Winslow, on Shawhill Boy.

GIG HORSES.

Exhibitors—A. L. Champlin, Ames; Griffin & Robinson, Riverside; Della L Lemon, Winnipeg, Canada; I. M. Winslow, Winnipeg, Canada.

Judges........................... { E. A. Trowbridge, Columbia, Mo.
R. P. Stericker, Chicago, Ill.

Horses Not Exceeding 15-2—First, Della L. Lemon, on England's Pride; second, Della L. Lemon on Radiant; third, Van Sant & Pemberton, on Froncine Larimore; fourth, I. M. Winslow, on Shawhill Boy.

Horses 15-2 or Over—First, I. M. Winslow, on Deanston Helen; second, Della L. Lemon, on Merry Maid; third, Della L. Lemon, on LeRoi; fourth, I. M. Winslow on Harveston Nell.

TANDEMS.

Exhibitors—A. L. Champlin, Ames; Earl M. Dixon, New Boston, Ill.; Della L. Lemon, Winnipeg, Canada; I. M. Winslow, Winnipeg, Canada.

Tandem Team, Wheeler Over 15-2—First, I. M. Winslow, on Deanston Helen and Shawhill Boy; second, Della L. Lemon, on Radiant and Mate Pride; third, A. L. Champlin, on Highball and Mate May Maiden; fourth, A. L. Champlin, on Prince of Greenhills Lady and Mate.

Tandem Team, Wheeler Under 15-2—First, I. M. Winslow, on Shawhill Boy and Perfect Dream; second, Della L. Lemon, on England's Pride and Radiant; third, Earl M. Dixon, on Polly Langdon and Francis G.; fourth, A. L. Champlin, on Pactolus Prince and Nevada.

Tandem Team, Any Size, Horses Alone to Be Considered—First, I. M. Winslow, on Deanston Helen and Shawhill Boy; second, Della L. Lemon, on England's Pride and Fashion; third, I. M. Winslow, on Perfect Dream and Sir Hector; fourth, Della L. Lemon, on Radiant and Merry Maid.

UNICORNS.

Exhibitors—A. L. Champlin, Ames; Della L. Lemon, Winnipeg, Canada; I. M. Winslow, Winnipeg, Canada.

Judges........................... { E. A. Trowbridge, Columbia, Mo.
R. P. Stericker, Chicago, Ill.

Unicorn Team, 15-1 and Over—First, I. M. Winslow, on Deanston Helen, Harveston Nell and Shawhill Boy; second, Della L. Lemon, on Merry Maid, Pride and Fashion; third, A. L. Champlin, on Highball, May Maiden and Lady; fourth, A. L. Champlin, on Prince of Greenhill's Lady, Lucky Boy and Lottery.

FOUR-IN-HAND.

Exhibitors—A. L. Champlin, Ames; Della L. Lemon, Winnipeg, Canada; I. M. Winslow, Winnipeg, Canada.

Judges........................... { E. A. Trowbridge, Columbia, Mo.
R. P. Stericker, Chicago, Ill.

Road Four—First, A. L. Champlin, on Highball, Lottery, Lady Greenhill and May Maiden; second, I. M. Winslow, on Shawhill Boy, Perfect Dream, Harveston Nell and Helen; third, Della L. Lemon, on Pride, Radiant, Le Roi and Merry Maid; fourth, A. L. Champlin, on Prince, Lucky Boy, Wilson and Tony.

Park Four—First, Della L. Lemon, on Radiant, Pride, Le Roi and Merry Maiden; second, I. M. Winslow, on Perfect Dream, Shawhill Boy, Helen and Harveston Nell; third, A. L. Champlin, on Highball, Lottery, May Maiden and Lady; fourth, A. L. Champlin, on Lucky Boy, Prince, Wilson and Tony.

CHAMPIONSHIP HARNESS HORSES.

Champion Harness Stallion—Della L. Lemon on Le Roi.

Champion Harness Mare or Gelding—First, I. M. Winslow, on Deanston Helen; second, Mrs. J. K. Dering, on Nelson Primrose.

Stable Manager's Prize—Managers of stables winning the greatest number of ribbons, either blue, red, white or pink in harness and saddle horse division—First, Della L. Lemon; second, I. M. Winslow; third, A. L. Champlin; fourth, Loula Long Combs.

Best Stable Decoration, Neatest and Most Attractive Harness or Saddle Horse Exhibit—First, A. L. Champlin; second, Della L. Lemon; third, I. M. Winslow; fourth, Mrs. J. M. Harris.

SADDLE HORSES.

Exhibitors—Thos. Bass, Mexico, Mo.; George Brandeis, Omaha; H. S. Burnham, Colorado Springs, Colo.; Miss Alberta Black, Jacksonville, Ill.; Loula Long Combs, Lee's Summit, Mo.; Mrs. Jackson K. Dering, Lake Villa, Ill.; H. C. Downing, Des Moines; Graceland Farm, Greenwood, Mo.; Griffin & Robinson, Riverside; C. T. Hall, Carthage, Mo.; Mrs. James Harris, Chicago; Della L. Lemon, Winnipeg, Canada; R. H. Lewis, Dallas, Texas; T. W. LeQuatte, Des Moines; Col. R. G. Munday, Maitland, Mo.; James McDaniel, Jacksonville, Ill.; James Stineshouser & Bass, Omaha; E. S. Van Sant & B. P. Pemberton, Chicago; A. E. Warren, Des Moines; Seth Way & Son, Oskaloosa; Williams & Ellington, Buffalo, Ill.; I. M. Winslow, Winnipeg, Canada.

Judges........................... { E. A. Trowbridge, Columbia, Mo.
R. P. Stericker, Chicago, Ill.

Five Gaited Stallion Four Years Old and Over—First, Loula Long Combs, on Easter Cloud; second, C. T. Hall, on Tokhoma King, 6625; third, Loula Long Combs, on Major Highland; fourth, Van Sant & Pemberton on King's Fancy, 7843.

Stallion Two Years Old and Under Three—First, C. T. Hall, on Hallwood Bob O Link, 7482.

Five Gaited Mare Four Years Old and Over—First, Loula Long Combs, on Virginia Loyde; second, Geo. Brandeis, on Princess McDonald; third, Loula Long Combs, on Miss Mischief; fourth, Stineshouer & Bass on Dardanella.

Five Gaited Mare Three Years Old and Under Four—First, Thos. Bass on Edna June; second, Col. R. G. Munday, on Gladys Irwin; third, Della L. Lemon, on Lorette.

Five Gaited Mare Two Years Old and Under Three—First, C. T. Hall, on Pettibocker.

Five Gaited Gelding Four Years Old and Over—First, Geo. Brandeis, on Over the Top, 8358; second, Loula Long Combs, on Easter Forest; third, James Stineshouer & Bass, on Marvin Blees; fourth, Van Sant & Pemberton, on King's Mate.

Five Gaited Gelding Three Years Old and Under Four—First, Loula Long Combs, on Sherman Dare; second, Col. R. G. Munday, on Luke Blackburn.

Five Gaited Ladies' Saddle Horse, Lady Rider—First, Thos. Bass, on Susan Francis; second, Mrs. Jackson K. Dering, on Sunshine; third, Van

Sant & Pemberton, on King's Fancy; fourth, A. E. Warren, on Willoughby Boy, 65720.

Pair Five Gaited Saddle Horses, Mares or Geldings, Property of One Exhibitor, Ridden by Gentleman and Lady. Conformation to Count 40 Per Cent; Performance, 40 Per Cent; Appointment, 20 Per Cent—First, Thos. Bass, on Susan Francis and Miss Astril; second, C. T. Hall, on Sadie Satin and Edna June.

Five Gaited Champion Stallion—Loula Long Combs, on Easter Cloud.

Five Gaited Champion Mare—Loula Long Combs on Susan Francis.

Five Gaited Champion Gelding—Geo. Brandeis on Over the Top.

Five Gaited Stallion, Mare or Gelding, Any Age—First, Loula Long Combs, on Easter Cloud; second, Geo. Brandeis, on Over The Top 8358; third, C. T. Hall, on Tokhoma King, 11260; fourth, Loula Long Combs, on Miss Mischief; fifth, Geo. Brandeis, on Princess McDonald; sixth, Williams & Ellington, on Outo-Be King; seventh, Mrs. J. K. Dering, on Sunshine; eighth, Van Sant & Pemberton, on King's Mate.

Three Gaited Mare or Gelding, Any Age, 15-2 and Over, and Up, Carrying 175 Pounds—First, Loula Long Combs, on Golden Lass; second, Geo. Brandeis, on Sparkling Burgundy; third, Mrs. J. K. Dering, on Dink Stover; fourth, Thos. Bass, on Nickel Plate.

Three Gaited Mare or Gelding, Any Age, 14-2 to 15-2—First, Mrs. J. M. Harris, on Homestead Choice; second, Loula Long Combs, on Mildred Dare; third, Mrs. J. K. Dering, on Watchful; fourth, Geo. Brandeis on Emma Dean, 11869.

Pair Three Gaited Saddle Horses, Mares or Geldings, the Property of One Exhibitor, Ridden by Gentleman and Lady. Conformation to Count 40 Per Cent; Performance, 40 Per Cent, and Appointments, 20 Per Cent—First, Mrs. J. M. Harris, on Homestead Choice, and Zeleta Best; second, Mrs. J. K. Dering, on Dink Stover and Watchful; third, Thos. Bass, on Nickel Plate and Susan.

Three Gaited Champion Mare or Gelding—First, Loula Long Combs, on Golden Lass; second, Mrs. James Harris, on Homestead Choice.

Three Gaited Stallion, Mare or Gelding, Any Age—First, Loula Long Combs, on Golden Lass; second, Mrs. James Harris, on Homestead Choice; third Loula Long Combs, on Mildred Dare; fourth, Geo. Brandeis, on Sparkling Burgundy; fifth, Mrs. J. K. Dering, on Watchful; sixth, Thos. Bass, on Nickel Plate; seventh, Mrs. J. K. Dering, on Dink Stover; eighth, C. T. Hall, on Madelon of Hallwood, 13690.

Stallion, Mare or Gelding, Any Age, Five Gaited—First, Geo. Brandeis, on Princess McDonald; second, Mrs. J. K. Dering, on Sunshine; third, Loula Long Combs, on Major Highland; fourth, Van Sant & Pemberton ,on King's Fancy.

Stallion, Mare or Gelding, Any Age, Three Gaited—First, Loula Long Combs, on Mildred Dare; second, Geo. Brandeis on Sparkling Burgundy; third, Mrs. J. K. Dering, on Watchful; fourth, Mrs. J. K. Dering, on Dink Stover.

Stallion, Mare or Gelding, Any Age—First, Thos. Bass, on Belle Beach; second, Graceland Farm, on Vivian H; third, Griffin & Robinson, on Margaret Clark; fourth, Stinehouer & Bass, on Martha Thomson.

ADDITIONAL CLASS FOR NIGHT SHOW.

Ladies' Three Gaited Saddle Horses—First, Mrs. James Harris, on Homestead Choice; second, Thos. Bass, on Nickel Plate; third, Mrs. James Harris, on Zeleta's Best.

LOCAL, OWNED IN IOWA.

Stallion, Mare or Gelding, Five Gaited, Three Years Old or Over—First, H. C. Downing, on Cigarette; second, Griffin & Robinson on Harry Wells;

third, F. W. LeQuatte, on Madison Girl; fourth, Griffin & Robinson, on Lonnie McDonald.

Stallion, Mare or Gelding, Three Gaited, Three Years Old or Over—First, Seth Way & Son, on Capt. Cassidy; second, Griffin & Robinson, on Harry Wells; third, Griffin & Robinson, on Starlight June; fourth, Seth Way & Son, on Roi Tan.

HUNTERS AND HIGH JUMPING.

Exhibitors—Della L. Lemon, Winnipeg, Canada; Halger Rasmussen, Chicago; I. M. Winslow, Winnipeg, Canada; H. O. Wetmore, Chicago.

Light Weight Hunters, Up to Carrying 150 Pounds to Hounds, Best Performance Over Four Successive Jumps—First, H. O. Wetmore, on Lucky Strike; second, Della L. Lemon, on Lorraine.

Middle Weight Hunters, Up to Carrying 175 Pounds, to Hounds, Best Performance Over Four Successive Jumps—First, I. M. Winslow, on Pride of Erin; second, W. C. Mortimer, on The Huntsman.

Heavy Weight Hunters, Up to Carrying 200 Pounds, to Hounds, Best Performance Over Four Successive Jumps—First, W. C. Mortimer, on The Parson; second, Della L. Lemon, on Bon Ton; third, W. C. Mortimer, on The Spur.

Lady's Hunter, Ridden by Lady—First, H. O. Wetmore, on The Huntsman; second, Della L. Lemon, on Bon Ton; third, I. M. Winslow, on Pride of Erin; fourth, H. O. Wetmore, on The Parson.

Champion Hunter—First, I. M. Winslow, on Pride of Erin; second, H. O. Wetmore, on Lucky Strike.

Hunter Pairs. Light Weight Hunters, Up to Carrying 150 Pounds, to Hounds—First, W. C. Mortimer; second, Della L. Lemon.

Middle Weight Hunters, Up to Carrying 175 Pounds, to Hounds—First, Della L. Lemon, on Bon Ton and Lorraine; second, W. C. Mortimer, on Huntsman and Spur.

Heavy Weight Hunters, Up to Carrying 200 Pounds, to Hounds—First, Della L. Lemon, on Bon Ton and Lorraine; second, W. C. Mortimer, on The Parson and The Spur.

High Jump—First, Della L. Lemon, on Lorraine; second, W. C. Mortimer, on the Huntsman; third, Della L. Lemon on Nimble Toe; fourth, W. C. Mortimer, on The Parson.

MILITARY HORSES.

Exhibitors—Thos. Bass, Mexico, Mo.; George Brandeis, Omaha; H. S. Burnham, Colorado Springs, Colo.; Griffin & Robinson, Riverside; Della L. Lemon, Winnipeg, Canada; Col. R. G. Munday, Maitland, Mo.; James Stinehauser & Bass, Omaha; Seth Way & Son, Oskaloosa; A. L. Champlin, Ames; Loula Long Combs, Lee's Summit, Mo.; C. T. Hall, Carthage, Mo.; Truman's Pioneer Stud Farm, Bushnell, Ill.; E. S. Van Sant & B. R. Pemberton, Chicago; Williams & Pemberton, Ankeny; H. O. Wetmore, Chicago.

Judges.......................... { E. A. Trowbridge, Columbia, Mo.
R. P. Stericker, Chicago, Ill.

Gelding Suitable for Officers' Mount—First, H. O. Wetmore, on Lucky Strike; second, Col. R. G. Munday, on Rex Dillon; third, Seth Way & Son, on Roi Tan.

Stallion Suitable to Sire Cavalry Remounts to Be Shown to Halter—First, Griffin & Robinson, on Lonnie McDonald; second, Williams & Ellington, on Outo Be King; third, C. T. Hall on Hallwood Bob O Link, 7482; fourth, Van Sant & Pemberton, on King's Fancy.

HACKNEYS.

EXHIBITORS—A. L. Champlin, Ames; Mrs. Jackson K. Dering, Lake Villa, Ill.; Earl M. Dixon, New Boston, Ill.; Della L. Lemon, Winnipeg, Canada; I. M. Winslow, Winnipeg, Canada.

JUDGES.......................... { E. A. TROWBRIDGE, Columbia, Mo.
R. P. STERICKER, Chicago, Ill.

Stallion Four Years Old or Over—First, A. L. Champlin, on Wilson Mathias, 10520; second, Della L. Lemon, on Le Roi.

Yeld Mare Four Years or Over—First, I. M. Winslow, on Deanston Helen; second, Mrs. J. K. Dering, on Nelson Primrose; third, Della L. Lemon, on Frith Manor Mary; fourth, Della L. Lemon, on Island Merry Maid.

Mare Over Three and Under Four—First, Earl M. Dixon, on Full of Pep; second, A. L. Champlin, on Lady Greenhill.

Filly Over Two and Under Three—First A. L. Champlin on Miss Dainty 3347.

Champion Stallion—First, A. L. Champlin, on Wilson Mathias; second, Della L. Lemon, on Le Roi.

Champion Mare—First, I. M. Winslow, on Deanston Helen; second, Mrs. J. K. Dering, on Nelson Primrose.

Five Animals Owned by Exhibitor—First, I. M. Winslow; second, Earl M. Dixon; third, A. L. Champlin.

WELSH PONIES.

EXHIBITORS—Earl M. Dixon, New Boston, Ill.; Mrs. Adam Sterling, Winnipeg, Canada.

JUDGE................................LOGAN BLACK, Jacksonville, Ill.

Stallion Four Years Old or Over—First, Earl M. Dixon, on Model; second, Earl M. Dixon, on True Blue.

Mare Four Years Old or Over—First, Earl M. Dixon, on Dainty; second, Mrs. Adam Sterling, on Lynette of Montrose 984.

Mare Three Years Old and Under Four—First, Earl M. Dixon, on Miss Model.

Mare Two Years Old and Under Three—First, Earl M. Dixon, on Endora.

Champion Stallion—First, Earl M. Dixon, on Model; second, Earl M. Dixon, on True Blue.

Champion Mare—First, Earl M. Dixon, on Dainty; second, Mrs. Adam Sterling, on Lynette of Montrose.

Stallion and Three Mares—Earl M. Dixon.

SHETLAND PONIES.

EXHIBITORS—Frank Brideson, Bayard; G. W. Brideson, Panora; Earl M. Dixon, New Boston, Ill.; Mrs. Adam Sterling, Des Moines; A. E. Warren, Des Moines; D. G. Welty, Nevada; F. R. Wilson, Colorado.

JUDGE................................LOGAN BLACK, Jacksonville, Ill.

Stallion Four Years and Over—First, Mrs. Adam Sterling, on Belle Meade Faultless, 14459; second, Earl M. Dixon on Silver Tips "D"; third, D. G. Welty, on Locust J. 16600; fourth, Earl M. Dixon on Bon Tips.

Stallion Three Years Old and Under Four—First, Mrs. Adam Sterling, on Billy Jones; second, Earl M. Dixon, on Woodlawn King; third, D. G. Welty, on Johnny Jones; fourth, G. W. Brideson, on Mills Delight.

Stallion Two Years Old and Under Three—First, Earl M. Dixon, on King of the West; second, Mrs. Adam Sterling, on Boston's Bounce, 18255; third, D. G. Welty, on T. S. Simpson; fourth, Earl M. Dixon, on Laddie Knight.

Stallion or Mare Foal—First, Mrs. Adam Sterling; second, Frank Brideson; third, F. R. Wilson; fourth, F. R. Wilson.

Mare Four Years Old or Over—First, Earl M. Dixon, on Susanna D.; second, Earl M. Dixon, on Ovilta; third Mrs. Adam Sterling, on Belle Meade Boston, 9691; fourth, D. G. Welty, on Princess Welcome.

Mare Three Years Old and Under Four—First, Earl M. Dixon, on Aldine Zella; second, D. G. Welty, on Nevada Girl; third, Mrs. Adam Sterling, on Romana Larigo, 18152; fourth, Frank Brideson, on Queen.

Mare Two Years Old and Under Three—First, Earl M. Dixon, on Ruthie; second, Mrs. Adam Sterling, on Blossoms Bonnie; third, Mrs. Adam Sterling, on Princess Winsome.

Mare and Foal—First, D. G. Welty, on Queen of Fleet; second, D. G. Welty, on Princess Welcome; third, Mrs. Adam Sterling, on Belle Meade Boston, 9691; fourth, F. R. Wilson.

Four Colts, Get of One Sire—First, Earl M. Dixon; second, Mrs. Adam Sterling; third, D. G. Welty; fourth, G. W. Brideson.

Champion Stallion—First, Mrs. Adam Sterling, on Belle Meade Faultless; second, Earl M. Dixon, on King of the West.

Champion Mare—First, Earl M. Dixon, on Susanna D.; second, Earl M. Dixon, on Ruthie.

Stallion and Three Mares—First, Mrs. Adam Sterling; second, Earl M. Dixon; third, D. G. Welty; fourth, D. G. Welty.

HACKNEY PONIES.

Exhibitors—Mrs. Jackson K. Dering, Lake Villa, Ill.; Earl M. Dixon, New Boston, Ill.; Mrs. Adam Sterling, Des Moines, Iowa.

Judge................................Logan Black, Jacksonville, Ill.

Stallion Four Years Old or Over—First, Mrs. Adam Sterling, on Lammermore King, 1859.

Stallion Three Years Old and Under Four—First, Earl M. Dixon, on Wonderful.

Mare Four Years Old and Over—First, Mrs. J. K. Dering, on Polly Southworth; second, Mrs. J. K. Dering, on Queenie Horace; third, Earl M. Dixon, on White Wing.

Mare Three Years Old and Under Four—First, Mrs. J. K. Dering, on Bushnell-Polly Southworth.

Mare Two Years Old and Under Three—First, Mrs. Adam Sterling, on Queen of Edinbrae.

Champion Stallion—First, Mrs. Adam Sterling, on Lammermore King; second, Earl M. Dixon, on Wonderful.

Champion Mare—First J. K. Dering, on Polly Southworth; second, J. K. Dering, on Bushnell-Polly Southworth.

PONIES IN HARNESS.

Exhibitors—Mrs. Jackson K. Dering, Lake Villa, Ill.; Frank Brideson, Bayard; G. W. Brideson, Panora; Earl M. Dixon, New Boston, Ill.; Chas. Irvine, Ankeny; Mrs. Adam Sterling, Des Moines; Seth Way & Son, Oskaloosa; A. E. Warren, Des Moines; D. G. Welty, Nevada: F. R. Wilson, Colo.

Judge.............................Logan Black, Jacksonville, Ill.

Pony Under 10½ Hands—First, Earl M. Dixon on Susanna "D"; second, D. G. Welty on Romping Flash; third, Mrs. Adam Sterling on Belle Meade Faultless.

Pair Ponies Under 10½ Hands—First, Earl M. Dixon on Ovilta and Larigo; second, Mrs. Adam Sterling on Belle Meade Faultless and mate; third, D. G. Welty on Lucille and Nevada Girl.

Pony 10½ to 11½ Hands—First, Earl M. Dixon on Silver Tips "D"; second, D. G. Welty on Silver Crescent; third, D. G. Welty on Princess Welcome; fourth, Mrs. Adam Sterling on Nip.

Pair Ponies 10½ to 11½ Hands—First, Earl M. Dixon, on Silver Tips and Mate; second, D. G. Welty on Princess Welcome and Mate; third, Mrs. Adam Sterling; fourth, D. G. Welty on Silver Crescent and Mate.

Pony 11½ to 12½ Hands—First, Mrs. Adam Sterling on Lynette of Montrose; second, Earl M. Dixon on Model; third, Earl M. Dixon on Dixon's Choice.

Pair Ponies 11½ to 12½ hands—First, Mrs. Adam Sterling on Lynette of Montrose and Peggy.

Pony 12½ to 13½ Hands—First, Earl M. Dixon, on White Wing.

Pair Ponies 12½ to 13½ Hands—First, Earl M. Dixon on True Blue and Mate.

Pony 13½ to 14½ Hands—First, Mrs. Adam Sterling on Lammermore King; second, Earl M. Dixon on Forest King.

Tandem Team Under 12½ Hands—Mrs. J. K. Dering on Queenie Horace and Bushnell Polly Southworth; second, Earl M. Dixon on Model and Dixon's Choice; third, Earl M. Dixon on Silver Tip "D" and Susanna "D"; fourth, Mrs. Adam Sterling on Belle Meade Faultless and Nipper.

Tandem Team Over 12½ Hands—First, Earl M. Dixon on True Blue and Dainty.

Four-in-Hand Under 12½ Hands—First, Earl M. Dixon; second, D. G. Welty; third, Mrs. Adam Sterling.

Champion Harness Pony—First, Mrs. Adam Sterling on Lammermore King; second, Earl M. Dixon on Model.

Champion Pair Harness Ponies—First, Earl M. Dixon; second, Earl M. Dixon.

PONIES UNDER SADDLE.

Exhibitors—Mrs. Jackson K. Dering, Lake Villa, Ill.; Frank Brideson, Bayard; G. W. Brideson, Panora; Mrs. Adam Sterling, Des Moines; D. G. Welty, Nevada; F. R. Wilson, Colo; Chas. Irvine, Ankeny; Springbrook Farm, Walkerville, Md.; Earl M. Dixon, New Boston, Ill.; Seth Way & Son, Oskaloosa, Iowa.

Judge............................Logan Black, Jacksonville, Ill.

Saddle Pony Under 10½ Hands—First, Frank Brideson; second, D. G. Welty on Queen of Fleet; third, Mrs. Adam Sterling; fourth, F. R. Wilson.

Saddle Pony 10½ to 11½ Hands—First, Mrs. Adam Sterling on Sensation; second, F. R. Wilson on Jack; third, A. E. Warren on Ted; fourth, Chas. Irvine on Lady.

Saddle Pony 11½ to 12½ Hands—First, Mrs. Adam Sterling on Lynette of Montrose; second, D. G. Welty on Wynette; third, F. R. Wilson; fourth, Mrs. Adam Sterling on Peggy.

Saddle Pony 12½ to 13½ Hands—First, Mrs. Adam Sterling on Duncan; second, Mrs. Adam Sterling on Ned.

Saddle Pony 13½ to 14½ Hands—First, Mrs. Adam Sterling on Freckles; second, Mrs. Adam Sterling on Bonnie.

Champion Saddle Pony—First, Mrs. Adam Sterling on Lynette of Montrose; second, Mrs. Adam Sterling on Nip.

Stable Managers' Prize—Managers of stables winning the greatest number of ribbons, either blue, red, white or pink in pony classes: First, Earl M. Dixon; second, Mrs. Adam Sterling; third, D. G. Welty; fourth, F. R. Wilson.

Stable Decorations—Best stable decoration, neatest and most attractive pony exhibit—First, Earl M. Dixon; second, Mrs. Adam Sterling; third, D. G. Welty.

MULES.

Exhibitors—Wyatt Carr & Son, Collins; Harry F. Copeland, Waukee; Henry C. Copeland, Waukee; F. L. Hutson & Son, State Center; J. W. Lisle, Jamaica; M. C. Peters Mill Co., Omaha; Carroll McKibben, Earlham; Frank A. Miller & Son, Carlisle; Ed Parmenter, Ankeny.

JUDGE............................E. A. TROWBRIDGE, COLUMBIA, MO.

Mule Four Years Old or Over.—First, Wyatt Carr & Son; second, F. L. Hutson & Son; third, J. W. Lisle; fourth, Wyatt Carr & Son.

Mule Three Years Old and Under Four—First, Wyatt Carr & Son; second, Henry C. Copeland; third, Wyatt Carr & Son; fourth, Carroll McKibben on Maud.

Mule Two Years Old and Under Three—First, Frank A. Miller & Son, on Rosy; second, Wyatt Carr & Son; third, F. L. Hutson & Son; fourth, Carroll McKibben on Fern.

Mule One Year Old and Under Two—First, F. L. Hutson & Son; second, Frank A. Miller & Son on Emma; third, Wyatt Carr & Son; fourth, Harry F. Copeland.

Mule Colt Under One Year Old—First, Carroll McKibben; second, Carroll McKibben; third, Ed Parmenter; fourth, Carroll McKibben.

Mule Over 15 Hands—First, Wyatt Carr & Son; second, Frank A. Miller & Son; third, F. L. Hutson & Son; fourth, J. W. Lisle.

Mule Under 15 Hands—First, Wyatt Carr & Son; second, Wyatt Carr & Son.

Pair mules Over 2400 Pounds to be Shown in Harness—First, J. W. Lisle; second, F. L. Hutson & Son; third, Wyatt Carr & Son; fourth, Harry F. Copeland.

Pair Mules Under 2400 Pounds to be Shown in Harness—First, F. L. Hutson & Son; second, Wyatt Carr & Son.

Tandem Team—Conformation, quality, manners and hitch considered—First, Wyatt Carr & Son.

Four Mule Team—Conformation, quality, manners and hitch considered: First, F. L. Hutson & Son; second, Wyatt Carr & Son; third, Henry C. Copeland; fourth, Harry F. Copeland.

Five Mules, Any Age—First, Wyatt Carr & Son; second, F. L. Hutson & Son; third, Carroll McKibben.

Champion Mule, Any Age—First, Frank A. Miller & Son; second, Wyatt Carr & Son.

Champion Pair of Mules, Any Age—First, J. W. Lisle; second, F. L. Hutson & Son.

JACKS AND JENNETS.

EXHIBITORS—Wesley Agan, East Peru; F. Berkey & Son, Ankeny; Carroll McKibben; Earlham; Otto Bros., Greentop, Mo.

JUDGE............................E. A. TROWBRIDGE, COLUMBIA, MO.

Jack Four Years or Over—First, Wesley Agan on Logan 11213; second, Otto Bros., on Otto's Favorite; third, Carroll McKibben on Captain Crist 23947.

Jack Three Years Old and Under Four—First, Carroll McKibben on Roan Star 23146; second, Otto Bros., on Silver Mine 17926; third, Otto Bros., on Joe Harris 8219.

Jack Two Years Old and Under Three—First, Otto Bros., on Big Ben; second, Otto Bros., on Otto's Paymaster; third, Otto Bros., on Dr. Arrington.

Jack One Year Old and Under Two—First, Otto Bros., on Otto's Taxpayer.

Jack Colt Under One Year—First, Otto Bros., on Otto's Jumbo.

Jack and Four Mule Colts, any age, uniformity to be considered—First, Carroll McKibben.

Champion Jack—First, Otto Bros., on Big Ben.

Jennet Four Years Old or Over—First, Otto Bros., on Ferry's Hanna 16895; second, Otto Bros., on Miss Coons 17555.

Jennet One Year Old and Under Two—First, Otto Bros., on Otto's Queen.

Jennet and Two of Her Colts—First, Otto Bros.; second, Otto Bros.

CATTLE DEPARTMENT.

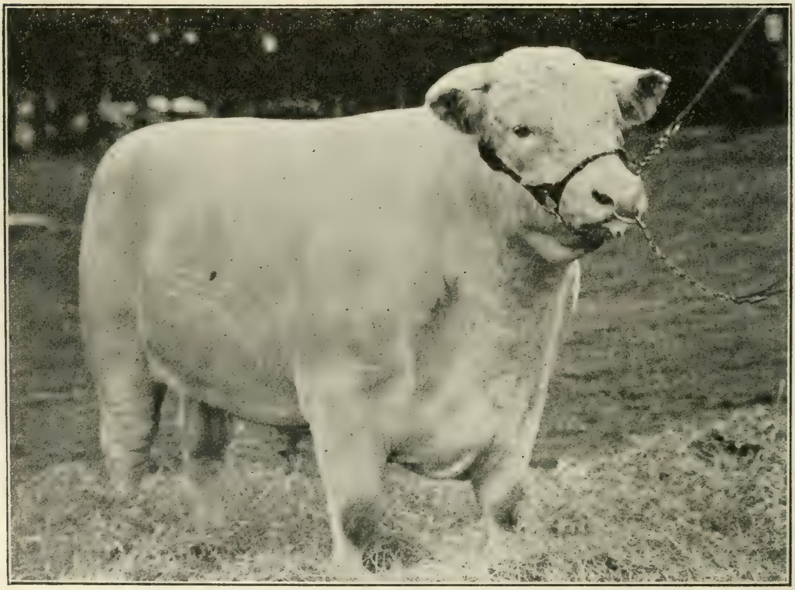
SUPERINTENDENT................................H. L. PIKE, Whiting

SHORTHORNS.

EXHIBITORS—M. L. Andrews, Melbourne; F. C. Barber & Sons, Skidmore, Mo.; G. H. Burge, Mt. Vernon; T. J. Clarke & Son, Pella; Cahill Bros., Rockford; Cherry Grove Farm, Williamsville, Ill.; J. W. Dugan & Son, Kingsley; Dubes & Ohlson, Aurelia; A. R. Fennern, Avoca; W. A. Forsythe & Sons, Greenwood, Mo.; F. Gallmeyer, Mechanicsville; W. E. Graham & Sons, Prairie City; Gridley & Overton, Geneva, Ill.; George Gruber, Farragut; C. E. Hoover & Son, Delphos; Wm. Herkelman, Elwood; M. J. Hickey, Manning; Eben E. Jones, Rockland, Wis.; John T. Kramer & Sons, Tulsa, Okla.; George H. Koch, Brighton; Krizer Bros., Eddyville; Loveland Stock Farm, Mt. Pleasant; Miller & Peterson, Memphis, Mo.; W. C. Moffit & Son, Ackworth; J. E. Mann, Woodbine; Joseph Miller & Sons, Granger, Mo.; Wm. Milne & Son, Mt. Pleasant; S. A. Nelson & Son, Malcolm, Neb.; Ben G. Studer, Wesley; W. E. Pritchard, Avoca; J. W. Rickey & Sons, Winfield; Rookwood Farm, Ames; Reynolds Bros., Lodi, Wis.; Frank Scofield, Hillsboro, Texas; Geo. F. Thede & Son, Durant; Turner Bros., Dewitt; W. B. Tague, Kirkman; Uppermill Farm, Wapello; Williams & Brand, Kanawha.

JUDGE..........................J. CHARLES YULE, Carstairs, Alberta

Bull Three Years or Over—First, Loveland Stock Farm on Cumberland Gift 575019; second, Rookwood Farm on Knight Avon 438984; third, M. L. Andrews on Cluny Royal Windsor 651028; fourth, Geo. F. Thede & Son on Count Gainford 596478; fifth, Ben G. Studer on Proud Emperor 497347; sixth, Wm. Milne & Sons on Courtier; seventh, Wm. Herkleman on Sultan's Model 558846; eighth, Geo. H. Koch on Sultan Lad 411217.



CUMBERLAND GIFT.

Grand Champion Shorthorn Bull. Loveland Stock Farm, Mt. Pleasant, Iowa.

Bull Two Years and Under Three—First, Wm. Milne & Sons on Cumberland Marshall 807342; second, Frank Scofield on Cullisse Band Sergeant; third, Joseph Miller & Son, on Pride of Albion 730697; fourth, Uppermill Farm on Coalshinney Broadhook; fifth, J. W. Rickey & Son on Villagers Alpine 679488; sixth, W. E. Graham & Son on Maxwalton Pure Gold 2nd 699946; seventh, Rookwood Farm on Village Count 709350; eighth, W. M. Milne & Sons on Jay Marshall 803929; ninth, Miller & Peterson on Merry Marquis 679803; tenth, W. C. Moffitt & Son, on White Boy 768944.

Bull Senior Yearling—First, M. J. Hickey on Gainford Modus 912655; second, Krizer Bros. on Stamp Goday 778912.

Bull Junior Yearling—First, Uppermill Farm on Village Javelin 823719; second, Joseph Miller & Sons, on Knight of Oakdale 877001; third, Loveland Stock Farm on Villager's Last 814602; fourth, Rookwood Farm on Count Venus 788197; fifth, Dubes and Ohlson on Village Monarch 872226; sixth, F. C. Barber & Sons on Village Augustus 881498; seventh, W. A. Forsythe & Sons on Hedgewood Gypsy King 921929; eighth, Uppermill Farm on Village Lad 855963; ninth, C. E. Hoover & Son on Villager's Dale 842846; tenth, Miller & Peterson on Pride's Selection 805472; eleventh, Eben E. Jones on Illshade Grown 808143; twelfth, Williams & Brand on Villager's Snowball 834574; thirteenth, Miller & Peterson on Royal Pride 870001; fourteenth, Wm. Herkleman on True Marengo 789681; fifteenth, Krizer Bros., on Marshal Favorite 778908.

Bull Senior Calf—First, Frank Scofield on Silver Heart 922949; second, F. C. Barber & Sons on Village Gainford; third, W. A. Forsythe & Son on Rosewood Luxury 921932; fourth, Joseph Miller & Son on Cumberland Matadore; fifth, W. E. Pritchard on Noble Dale; sixth, W. E. Pritchard on Village Dale; seventh, Dubes & Ohlson on Villager's Marshall 924733; eighth, Uppermill Farm on Villager's Victor; ninth, W. E. Graham & Son on Royal Champion 866975; tenth, Loveland Stock Farm on Village Count; eleventh, Dubes & Ohlson on Villager's Type 924736; twelfth, Geo. F. Thede & Son on Baron Gainford 923487; thirteenth, Eben E. Jones on Hillshade Monarch 922790; fourteenth, Wm. Herkleman on Premier Cumberland 922081; fifteenth, W. E. Graham & Sons on Royal Chief 866976.

Bull Junior Calf—First, F. Gallmeyer on Villager's Gloster; second, Uppermill Farm on Villager's Chief; third, Eben E. Jones on Hillshade Commander 913927; fourth, W. B. Tague on Dale's Gift; fifth, W. A. Forsythe & Son on Hedgewood Hope 921930; sixth, Frank Scofield on Red Baron 923989; seventh, Loveland Stock Farm on Royal Dale; eighth, Miller & Peterson on Oakdale Albion 924511; ninth, W. M. Milne & Son on Cumberland Joffre; tenth, John T. Kramer & Sons on Proud Emblem's Gift 877985; eleventh, J. E. Mann on Gainford's Type; twelfth, Wm. Herkleman on Cumberland's Star 922080; thirteenth, Ben G. Studer on Roan Sultan; fourteenth, G. H. Burge on Village Nominee; fifteenth, Wm. Herkelman on Legal Banker.

Cow Three Years or Over—First, Frank Scofield on Viola 214958; second, W. M. Milne & Son on Crimson Lass 507129; third, Loveland Stock Farm on Mina Ramsden 250425; fourth, Loveland Stock Farm on Linwood Bonnie 621310; fifth, W. M. Milne & Son on Meadow Flower 593427; sixth, Geo. F. Thede & Son on Victoria 2nd 596467; seventh, T. J. Clark & Son on Alice 525215.

Heifer Two Years and Under Three—First, Frank Scofield on Lady Supreme 694468; second, Loveland Stock Farm on Villager's Myrtle 814612; third, W. M. Milne & Son on Marsh Lilly 686643; fourth, Joseph Miller & Son on Cumberland Bess 3d 667935; fifth, W. M. Milne & Son on Missie of Oakdale 681202; sixth, Krizer Bros. on Bonnie Girl 721016; seventh, Krizer Bros. on Mildred Lavender 695346; eighth, Wm. Herkelman on Lady Cumberland 2nd 676012; ninth, Geo. F. Thede & Son on Roan Victoria 779587; tenth, T. J. Clark & Son on Red Lady II 826205; eleventh, T. J. Clark & Son on Lady Alexandrina 790421; twelfth, Eben E. Jones on Lovely Rose 841082.

Heifer Senior Yearling—First, Joseph Miller & Son on Miss Cumberland 2nd 796142; second, Loveland Stock Farm on Silver Mist II 765344; third, F. C. Barber & Sons on Perfection Rose 758894; fourth, John T. Kramer & Sons on Lavender Gazelle 722405; fifth, Frank Scofield on Lackawana Violet 837407; sixth, John T. Kramer & Sons on Emmeline 30th 722403; seventh, W. E. Pritchard on Geraldine 10th 795554; eighth, J. E. Mann on Dainty Dorothy 756775; ninth, W. A. Forsythe & Son on Mina Hedgewood 807138; tenth, J. E. Mann on Fair Sultana 756776; eleventh, G. H. Burge on Florella 5th 820891; twelfth, G. H. Burge on Village Rose 820898; thirteenth, T. J. Clark & Son on Maid 812732; fourteenth, T. J. Clark & Son on Red Maid 812733; fifteenth, Krizer Bros. on Broadhook Mildred 778915.

Heifer Junior Yearling—First, Eben E. Jones on Roan Goods 833058; second, F. Gallmeyer on Parkview Clipper 834576; third, Joseph Miller & Son on Choice Lavender 2nd 796142; fourth, Loveland Stock Farm on Queen of Gloster; fifth, Dubes & Ohlson on Nonpareil Beauty 837630; sixth, J. W. Dugan & Sons on Maid of the Mist 920615; seventh, W. M. Milne & Son on Golden Queen 807346; eighth, F. C. Barber & Son on Village Violet 2nd 758905; ninth, Frank Scofield on Lackawana Crimson 868159; tenth, F. Gallmeyer on Parkview Myrtle 834577; eleventh, Wm. Herkleman on Cumberland Flower 789683; twelfth, Miller & Peterson on Violet of Oakdale 870006; thirteenth, W. E. Pritchard on Fairview Lily III 793985; fourteenth, W. M. Milne & Son on Lady Cumberland 2nd 795988; fifteenth, Uppermill Farm on Villager's Daisy 4th 814610; sixteenth, Dubes & Ohlson on Dalmeny Princess 10th 872223.

Heifer Senior Calf—First, Uppermill Farm on Villager's Sue 3rd; second, John T. Kramer & Sons on Spirea's Emblem 860614; third, Loveland Stock Farms on Victoria Lady; fourth, Frank Scofield on Lackawana Blossom 3rd 923991; fifth, Wm. Herkleman on Lovely Cumberland 922083; sixth, F. Gallmeyer on Parkview Ivrona; seventh, W. E. Pritchard on Geraldine 8th; eighth, W. M. Milne & Son on Village Nonpareil; ninth, Joseph Miller & Son on Oakdale Beauty; tenth, Eben E. Jones on Hillshade Violet 919241; eleventh, W. E. Pritchard on Fairview Pink II; twelfth, Dubes & Ohlson on Villager Rose 924739; thirteenth, Wm. Herkleman on Rose Violet 3rd 922085; fourteenth, Eben E. Jones on Hillshade Claret 912939; fifteenth, John T. Kramer & Sons on Gazelle (twin) 860608; sixteenth, T. J. Clark & Son on Royal Lancaster 924894.

Heifer Junior Calf—First, F. Gallmeyer on Parkview Augusta; second, Uppermill Farm on Villager's Fragrance; third, Frank Scofield on Lackawana Vixen 918439; fourth, W. A. Forsythe & Son on Bessie Hedgewood 921934; fifth, John T. Kramer & Sons on Wedding Gift II 909026; sixth, Eben E. Jones on Hillshade Gloster 912940; seventh, Krizer Bros. on Mildred Lavender II 900397; eighth, J. E. Mann on Dainty Dagmar; ninth, J. E. Mann on Aberdeen Lavone; tenth, Ben G. Studer on Red Wing III; eleventh, W. E. Graham & Son on Royal Goldie 866912; twelfth, F. Gallmeyer on Ury Parkview; thirteenth, J. E. Mann on Queen of Beauty 20th; fourteenth, Ben G. Studer on Villager's Broadhooks II; fifteenth, Loveland Stock Farm on Cumberland Bessie 872664; sixteenth, T. J. Clark & Son on Royal Lancaster 924894.

Champion Bull Two Years Old or Over—Loveland Stock Farm on Cumberland Gift.

Champion Bull Under Two Years Old—Uppermill Farm on Village Javelin.

Grand Champion Bull, Any Age—Loveland Stock Farm on Cumberland Gift.

Champion Cow Two Years Old or Over—Frank Scofield on Lady Supreme.

Champion Heifer Under Two Years Old—Joseph Miller & Sons on Miss Cumberland 2nd.

Grand Champion Cow or Heifer Any Age—Frank Scofield on Lady Supreme.

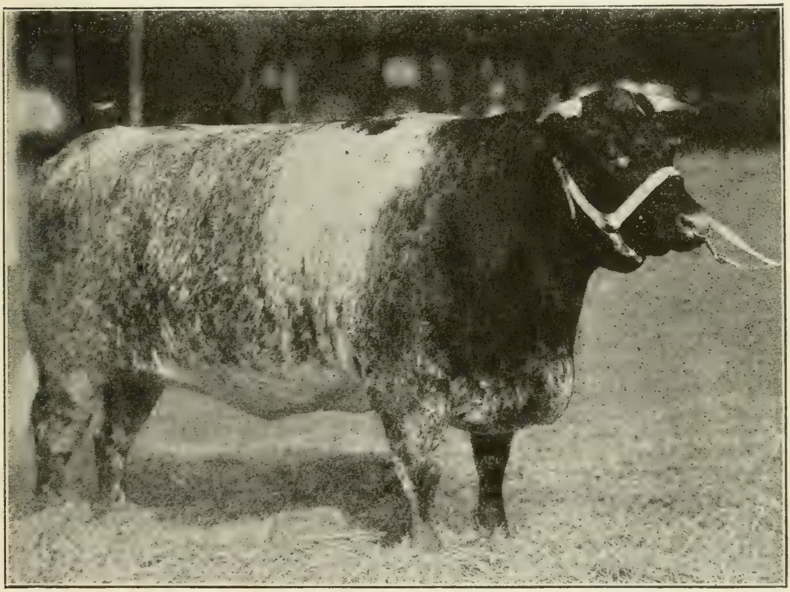
Graded Herd—First, Loveland Stock Farm; second, Frank Scofield; third, W. M. Milne & Son; fourth, Joseph Miller & Son; fifth, W. M. Milne & Son; sixth, Wm. Herkleman; seventh, Geo. T. Thede & Son.

Breeders Young Herd—First, Joseph Miller & Son: second, Frank Scofield; third, F. Gallmeyer; fourth, Uppermill Farm; fifth, John T. Kramer & Sons; sixth, W. E. Pritchard; seventh, J. E. Mann; eighth, W. A. Forsythe & Sons.

Breeders Calf Herd—First, Uppermill Farm; second, F. Gallmeyer; third, W. E. Pritchard; fourth, John T. Kramer & Sons; fifth, Joseph Miller & Son; sixth, Loveland Stock Farm; seventh, Eben E. Jones; eighth, Wm. Herkleman; ninth, Frank Scofield; tenth, J. E. Mann.

Get of Sire—First, Uppermill Farm; second, Joseph Miller & Son; third, F. Gallmeyer; fourth, W. E. Pritchard; fifth, F. C. Barber & Sons; sixth, John T. Kramer & Sons; seventh, Eben E. Jones; eighth, Dubes & Ohlson; ninth, Wm. Herkleman.

Produce of Cow—First, W. M. Milne & Son; second, Joseph Miller & Sons; third, Frank Scofield; fourth, J. E. Mann; fifth, Miller & Peterson; sixth, J. E. Mann; seventh., Geo. F. Thede & Son.



LADY SUPREME.

Grand Champion Shorthorn Cow. Frank Scofield, Hillsboro, Texas.

Group Cow with Own Calf by Side—First, Eben E. Jones on Cumberland's Marvel 149344; second, Joseph Miller & Son on Cumberland Bess 2nd 576194; third, Geo. F. Thede & Son on Roan Victoria 169086; fourth, Wm. Herkleman on Dalmeny Fairview 178470; fifth, G. H. Burge.

IOWA SHORTHORN SPECIALS.

Bull Three Years or Over—First, Loveland Stock Farm on Cumberland Gift; second, Rookwood Farm on Knight Avon; third, M. L. Andrews on Cluny Royal Windsor; fourth, G. F. Thede & Son on Count Gainford; fifth, Ben G. Studer on Proud Emperor; sixth, W. M. Milne & Son on Courtier; seventh, Wm. Herkelman on Sultan's Model; eighth, Geo. H. Koch on Sultan Lad.

Bull Two Years Under Three—First, W. M. Milne & Sons on Cumberland Marshall; second, Uppermill Farm on Coalshinney Broadhook; third, J. W. Rickey & Son on Villager's Alpine; fourth, W. E. Graham & Son on Maxwalton Pure Gold 2nd; fifth, Rookwood Farm on Village Count; sixth, W. M.

Milne & Son on Jay Marshall; seventh, Miller & Peterson on Merry Marquis; eighth, W. C. Moffit & Son on White Boy.

Bull Senior Yearling—First, M. J. Hickey on Gainford Modus; second, Krizer Bros., on Stamp Goday.

Bull Junior Yearling—First, Uppermill Farm on Village Javelin; second, Loveland Stock Farm on Villager's Last; third, Rookwood Farm on Count Venus; fourth, Dubes & Ohlson on Village Monarch; fifth, Uppermill Farm on Village Lad; sixth, C. E. Hoover & Son on Villager's Dale; seventh, Williams & Brand on Villager's Snowball; eighth, Wm. Herkleman on True Marengo; ninth, Krizer Bros., on Marshall Favorite.

Bull Senior Calf—First, W. E. Pritchard on Noble Dale; second, W. E. Pritchard on Village Dale; third, Dubes & Ohlson on Villager's Marshall; fourth, Uppermill Farm on Villager's Victor; fifth, W. E. Graham & Son on Royal Champion; sixth, Loveland Stock Farm on Village Count; seventh, Duess & Ohlson on Villager's Type.

Bull Junior Calf—First F. Gallmeyer on Villager's Gloster; second, Uppermill Farm on Villager's Chief; third, W. B. Tague on Dale's Gift; fourth, Loveland Stock Farm on Royal Dale; fifth, W. M. Milne & Son on Cumberland Joffre; sixth, J. E. Mann on Gainford Type; seventh, Wm. Herkleman on Cumberland's Star.

Cow Three Years or Over—First, Wm. Milne & Son on Crimson Lass; second, Loveland Stock Farm on Mina Ramdsen; third, Loveland Stock Farm on Linwood Bonnie; fourth, Wm. Milne & Son on Meadow Flower; fifth, Geo. F. Thede & Son on Victoria 2nd; sixth, T. J. Clark & Son on Alice.

Heifer Two Years and Under Three—First, Loveland Stock Farm on Villager's Myrtle; second, Wm. Milne & Son on Marsh Lily; third, Wm. Milne & Son on Missie of Oakdale; fourth, Krizer Bros. on Bonnie Girl; fifth, Krizer Bros. on Mildred Lavender; sixth, Wm. Herkleman on Lady Cumberland 2nd; seventh, Geo. F. Thede & Son on Roan Victoria.

Heifer Senior Yearling—First, Loveland Stock Farm on Silver Mist 2nd; second, W. E. Pritchard on Geraldine 10th; third, J. E. Mann on Dainty Dorothy; fourth, J. E. Mann on Fair Sultana; fifth, G. H. Burge on Florella; sixth, G. H. Burge on Village Rose; seventh, T. J. Clark & Son on Maid.

Heifer Junior Yearling—First, F. Gallmeyer on Parkview Clipper; second, Loveland Stock Farm on Queen of Gloster; third, Dubes & Ohlson on Nonpareil Beauty; fourth, J. W. Dugan & Son on Maid of the Mist; fifth, Wm. Milne & Son on Golden Queen; sixth, G. Gallmeyer on Parkview Myrtle; seventh, Wm Herkleman on Cumberland Flower.

Heifer Senior Calf—First, Uppermill Farm on Villager's Sue 3rd; second, Loveland Stock Farm on Victoria Lady; third, Wm. Herkleman on Lovely Cumberland; fourth, F. Gallmeyer on Parkview Aurora; fifth, W. E. Pritchard on Geraldine 8th; sixth, Wm. Milne & Son on Village Nonpareil; seventh, W. E. Pritchard on Fairview Pink 2nd.

Heifer Junior Calf—First, F. Gallmeyer on Parkview Augustus; second, Uppermill Farm on Villager's Fragrance; third, Krizer Bros. on Mildred Lavender 2nd; fourth, J. E. Mann on Dainty Dagmar; fifth, J. E. Mann on Aberdeen Lavone; sixth, Ben G. Studer on Red Wing 3rd; seventh, W. E. Graham & Son on Royal Goldie.

IOWA AMATEUR SHORTHORNS.

Exhibitors—T. J. Clark & Son, Pella; F. Gallmeyer, Mechanicsville; M. J. Hickey, Manning; C. E. Hoover & Son, Delphos; Geo. H. Koch, Brighton; Krizer Bros., Eddyville; Miller Bros., Britt; W. C. Moffit & Son, Ackworth; Ben G. Studer, Wesley; Geo. F. Thede & Son, Durant; Turner Bros., Dewitt; Williams & Brand, Kanawha.

Judge..................................Rex Beresford, Ames, Iowa

Bull Two Years Under Three—First, W. C. Moffitt & Sons on White Boy 768944.

Bull Senior Yearling—First, M. J. Hickey on Gainford Modus; second, Krizer Bros. on Stamp Goday 778912.

Bull Junior Yearling—First, Krizer Bros. on Marshall Favorite 778908; second, C. E. Hoover & Son on Villager's Dale 842846; third, Williams & Brand on Villager's Snowball 834574.

Bull Senior Calf—First, Geo. F. Thede & Son on Gainsford's Worth 923491; second, Geo. H. Koch on Sultan Kidder.

Bull Junior Calf—First, F. Gallmeyer on Villager's Gloster; second, Ben G. Studer on Roan Sultan.

Heifer Two Years Under Three—First, Krizer Bros. on Bonnie Girl 721016; second, Krizer Bros. on Mildred Lavender 695346; third, T. J. Clark & Son on Lady Alexandrina 790421; Fourth, T. J. Clark & Son on Red Lady II 826205; fifth, Geo. F. Thede & Son on Roan Victoria 779587.

Heifer Senior Yearling—First, T. J. Clark & Son on Maid 812732; second, Krizer Bros. on Broadhook Mildred 778915; third, T. J. Clark & Son on Red Maid, 812733.

Heifer Junior Yearling—First, F. Gallmeyer on Parkview Clipper 834576; second, Frank Buchanan on Daisy Maid 876630; third, F. Gallmeyer on Parkview Myrtle 834577; fourth, Geo. F. Thede & Son on Gainford Sunrise 89243; fifth, Frank Buchanan on Lily Maid 876633; sixth, Turner Bros. on Silver Rose 765031.

Heifer Senior Calf—First, F. Gallmeyer on Parkview Ivrona; second, Krizer Bros. on Broadhook Dalmeny 900396; third, T. J. Clark & Son on Alexandrina B 924893; fourth, Lisle A. Fox on Village Flora.

Heifer Junior Calf—First, F. Gallmeyer on Parkview Augusta; second, Krizer Bros. on Mildred Dainty; third, Krizer Bros. on Mildred Lavender 900397; fourth, F. Gallmeyer on Ury Parkview; fifth, Ben G. Studer on Red Wing 3rd; sixth, T. J. Clark & Son on Royal Lancaster 924894; seventh, Geo. F. Thede & Son on Gainford Wreath; eighth, Ben G. Studer on Villager's Broadhooks; ninth, Ben G. Studer on Broadhook's Sultana.

Four Animals Any Age or Sex Shown by One Exhibitor or from same County—First, F. Gallmeyer; second, Krizer Bros.; third, Geo. F. Thede & Son; fourth, Ben G. Studer; fifth, T. J. Clark & Son.

Special Prizes for Amateurs—Offered by the American Shorthorn Breeders Association:

Bull Calf, Senior or Junior, Bred and Owned by Exhibitor—Geo. F. Thede & Son on Gainford's Worth 923491.

Heifer Calf, Senior or Junior, Bred and Owned by Exhibitor—F. Gallmeyer on Parkview Augusta.

MILKING SHORTHORNS.

Exhibitor—R. R. Clampitt, New Providence.

Judge..............................Elliott Davis, Holbrook, Neb.

Bull Three Years or Over—First, R. R. Clampitt on White Prince 648027.

Bull Two Years Under Three—First, (no entries).

Bull One Year Under Two—First, R. R. Clampitt on Edgewood Prince; second, R. R. Clampitt on Prince Clay 881520.

Bull Under One Year—First, R. R. Clampitt on Roan Prince 881521.

Cow Five Years or Over—First, R. R. Clampitt on Florence 199573.

Cow Three Years Under Five—First, R. R. Clampitt on Wisconsin Rose 573385; second, R. R. Clampitt on Daisy 512265.

Cow Two Years Under Three—First, R. R. Clampitt on Red Fern C 683216; second, R. R. Clampitt on Florence II 714662.

Heifer Senior Yearling—First, R. R. Clampitt on Beauty 153143.

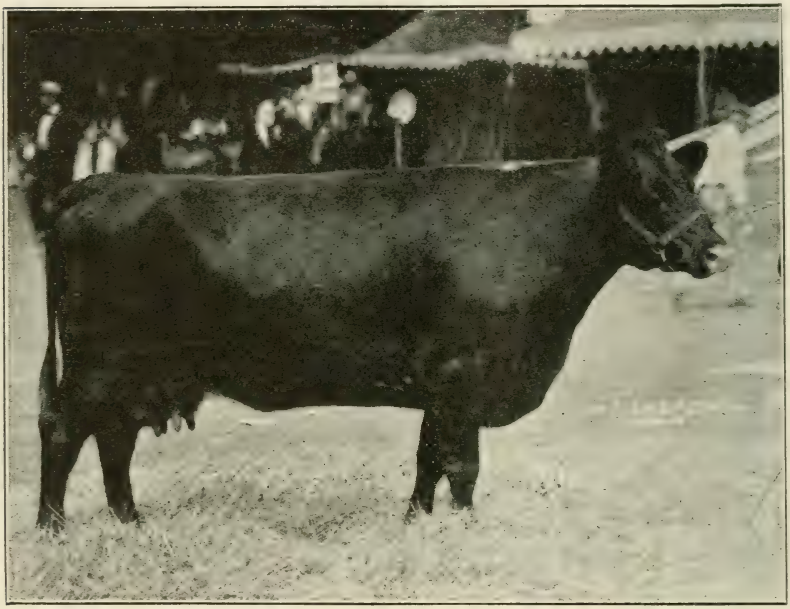
Heifer Junior Yearling—First, R. R. Clampitt on Edgewood Dora 881526; second, R. R. Clampitt on Mary Rose II 816519.

Heifer Senior Calf—First, R. R. Clampitt on May Blossom 881528; second, R. R. Clampitt on Fairy Dale.

Heifer Junior Calf—First, R. R. Clampitt on Golden Dale.

Champion Bull Two Years or Over—R. R. Clampitt on White Prince 648027.

Champion Bull Under Two Years—R. R. Clampitt on Roan Prince 881521.



FLORENCE.

Grand Champion Milking Shorthorn Cow. R. R. Clampitt, New Providence, Iowa.

Grand Champion Bull Any Age—R. R. Clampitt on White Prince 648027.

Champion Cow Two Years or Over—R. R. Clampitt on Florence 199573.

Champion Heifer Under Two Years—R. R. Clampitt on Edgewood Dora 881526.

Grand Champion Cow or Heifer Any Age—R. R. Clampitt on Florence 199573.

Graded Herd—First, R. R. Clampitt.

Calf Herd—First, R. R. Clampitt.

Get of Sire—First, R. R. Clampitt.

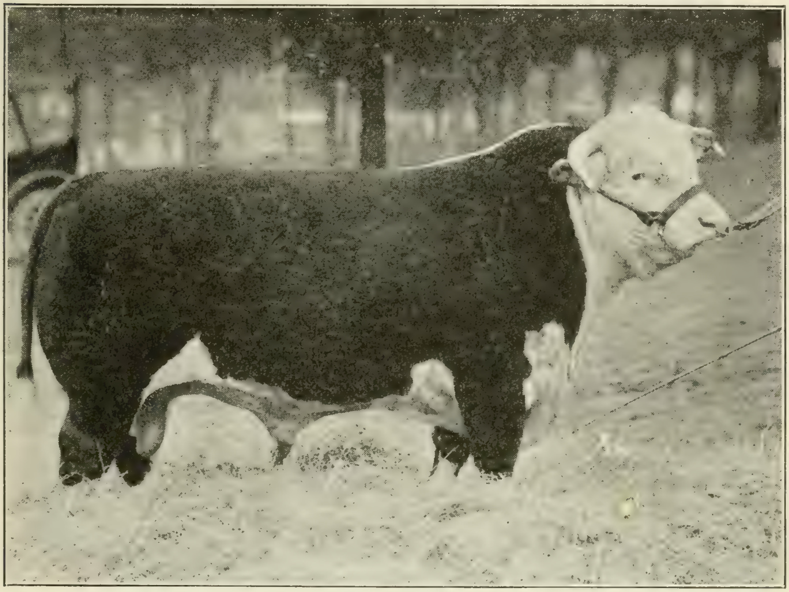
Produce of Cow—First, R. R. Clampitt; second, R. R. Clampitt.

HEREFORDS.

Exhibitors—W. N. W. Blayney, Edgewater, Colo.; B. T. Bartlett, Greencastle, Mo.; M. W. Beatty, Valley Junction; E. M. Cassady & Sons, Whiting; P. M. Christenson, Lone Rock; P. F. Dougherty, Independence; Jesse Engle & Son, Sheridan, Mo.; Enochs Farms, Fernwood, Mo.; Ford's Hereford Farm, Cedar Rapids; Goernandt Bros., Aurora, Kan.; Heath & Pierson, Villisca; Letts & Turkington, Letts; G. E. Leslie, Estate of, Memphis, Mo.; Carl Miller, Belone, Kan.; Leroy McWhorter & Son, Burt; Wm. McArthur, Mason City; R. G. McDuff, Monroe; Mary Jane Switzer, Kansas City; Turner Lumber & Investment Co., Kansas City, Mo.; Terrace Lake Hereford Park, Kansas City, Mo.; S. H. Velie, Kansas City, Mo.; Wallace and E. G. Good, Kansas City, Mo.; W. L. Yost, Kansas City, Mo.

JUDGE.................................J. C. KINZER, Versailles, Ky.

Bull Three Years or Over—First, Estate of G. E. Leslie on Lord Dandy 560423; second, The Enochs Farm on Prince Rupert 82d 562296; third, Leroy McWharter & Son on Beau Prince 630649; fourth, Goernandt Bros. on Polled Harmon 2nd 659669; fifth, Goernandt Bros. on Polled Harmon 1st 659668.



BEAU BEST.

Grand Champion Hereford Bull (Two Years). Wallace & E. G. Good, Kansas City, Mo.

Bull Two Years and Under Three—First, Wallace and E. G. Good on Beau Best 890000; second, W. N. W. Blayney on Blayney's Domino 706077; third, B. T. Bartlett on Bonnie B 60th I Am 700522; fourth, Mary Jane Switzer on Daw 692189; fifth, Turner Lumber and Investment Co. on Beau Dorus 704555; sixth, The Enochs Farm on Donald Premier 691563; seventh, Goernandt Bros. on Worthmore 734860.

Bull Senior Yearling—First, W. N. W. Blayney on Wyoming 8th 775405; second, The Enochs Farm on Donald Woodford 362935; third, W. N. W. Blayney on Wyoming 9th 775406; fourth, W. L. Yost on Evermore 79097; fifth, Estate of G. E. Leslie on Bright Woodford 770778; sixth, Estate of G. E. Leslie on Woodford Lad 770782; seventh, Carl Miller on Echo Lad 220th 764875; eighth, W. L. Yost on Marengo 790715; ninth, Wallace and E. G. Good on Good Donald 25th 780021; tenth, Letts and Turkinton on Incomparable 5th 760084; eleventh, Turner Lumber & Investment Co. on Laurel Anxiety 796053; twelfth, Wm. McArthur on Paladin B 791833; thirteenth, Goernandt Bros. on Polled Harmon 7th 778394.

Bull Junior Yearling—First, W. L. Yost on Avalanche 790693; second, Jesse Engle & Son on Beau Blanchard 90th 787278; third, Ford's Hereford Farm on Marion Lad 4th 797167; fourth, Turner Lumber & Investment Co. on Laurel Paragon 873591; fifth, W. L. Yost on Brummel Brae 822639; sixth, Wallace and E. G. Good on Good Donald 33rd 818128; seventh, Wallace and E. G. Good on Good Donald 32nd 815339; eighth, W. N. W. Blayney on Wyoming 15th 871927; ninth, Estate of G. E. Leslie on Woodford Elect 816840; tenth, Heath & Pierson on Dandy Brae 15th 806420; eleventh, The Enochs Farm on Young Bocaldo 797261; twelfth, Letts & Turkington on Beau Income 802918; thirteenth, W. L. Yost on Royal Brae 790719; fourteenth, R. G. McDuff on Condo Fairfax 858074; fifteenth, P. M. Christenson on Dale Grove 820441; sixteenth, Heath & Pierson on Maple's Dale 809420; seventeenth, Carl Miller on Echo Lad 240th 801903.

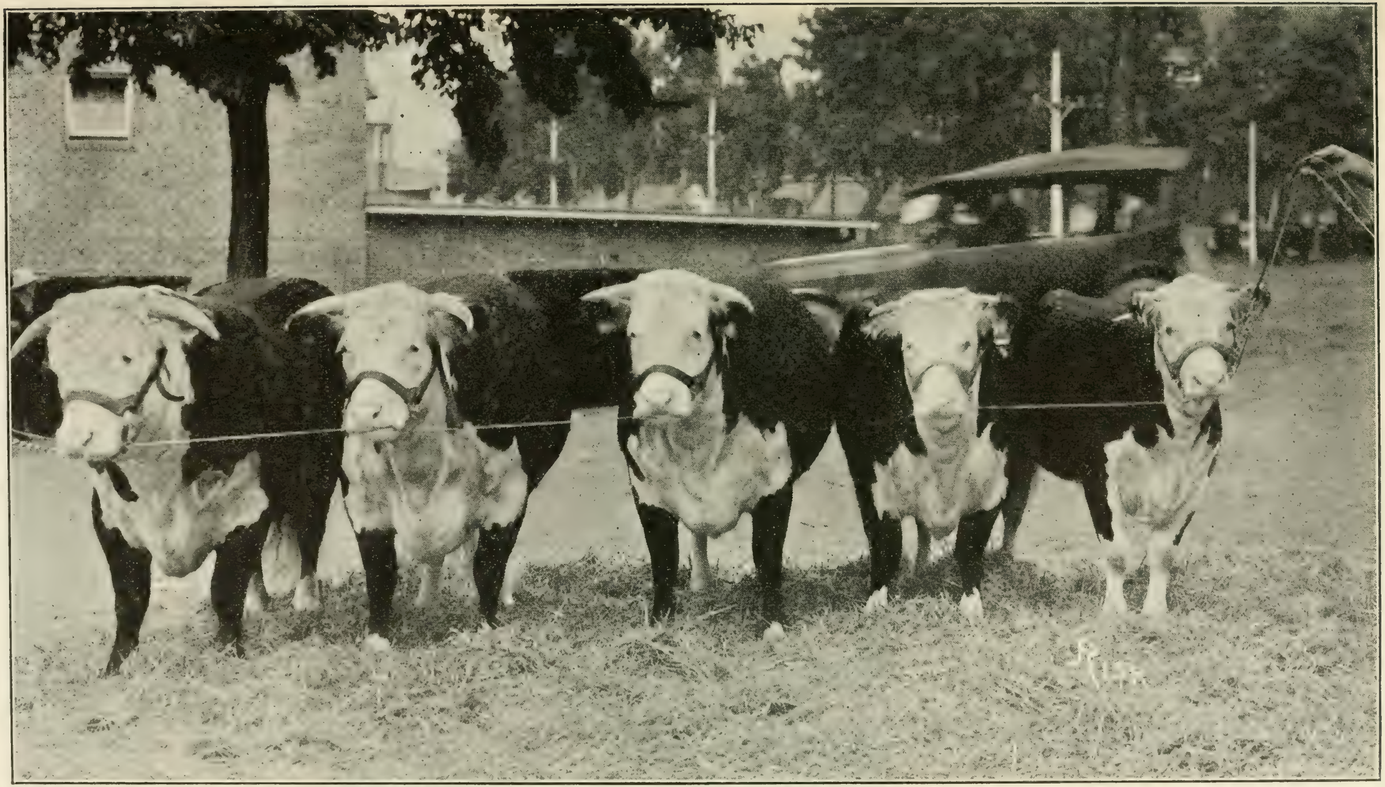
Bull Senior Calf—First, Estate of G. E. Leslie on Lord Dandy 2nd 886588; second, Mary Jane Switzer on Perfect Dow 2nd 874821; third, Jesse Engle & Son on Beau Blanchard 96th 886652; fourth, Jesse Engle & Son on Beau Blanchard 94th 886646; fifth, W. L. Yost on Gay Braemore 884100; sixth, E. M. Cassady & Son on Master Stanway 853256; seventh, Letts & Turkington on Incomparable 8th 849324; eighth, W. N. W. Blayney on Don Wyoming 781920; ninth, W. N. W. Blayney on Dandy Wyoming 886252; tenth, Carl Miller on Echo Lad 291st 898937; eleventh, Heath & Pierson on Dandy Brae 18th 867860; twelfth, P. M. Christenson on Geo. Grove 866369; thirteenth, P. M. Christenson on Peerless Rupert 874278; fourteenth, Wm. McArthur on Bonnie Royal 885234.

Bull Junior Calf—First, Wallace and E. G. Good on Good Donald 37th 898872; second, W. N. W. Blayney on Lad Wyoming 886255; third, Carl Miller on Echo Lad 270th 898938; fourth, W. L. Yost on Horace Brae 884103; fifth, W. L. Yost on Invincible 884106; sixth, Jesse Engle & Son on Beau Blanchard 103rd; seventh, Turner Lumber and Investment Co. on Beau Laurel 8th 910441; eighth, The Enochs Farm on Simpson's Rupert 885572; ninth, Ford's Hereford Farm on Marion Lad 34th 902850; tenth, Carl Miller on Echo Lad 269th 898937; eleventh, W. N. W. Blayney on Wyoming Domino 886255; twelfth, R. F. Dougherty on Highland Prince 3rd 893171; thirteenth, Ford's Hereford Farm on Marion Lad 27th 902840; fohrteenth, P. M. Christenson on Dandy's Brae 967294.

Cow Three Years or Over—First, E. M. Cassady & Son on Lily Stanway 699128; second, W. N. W. Blayney on Colorado Lassie 609731; third, Wallace and E. G. Good on Lady Donald 4th 635044; fourth, B. T. Bartlett on Begonia Wilton 621432; fifth, Leroy McWharter & Son on Maples Lass 82d 567930; sixth, Turner Lumber & Investment Co. on Hester 4th 499216; seventh, The Enochs Farms on Bonnie Master; eighth, B. T. Bartlett on Majestic Lady 544377; ninth, R. C. McDuff on Pearl (generous) 540228.

Heifer Two Years and Under Three—First, W. N. W. Blayney on Bonnie Wyoming 795226; second, Turner Lumber & Investment Co. on Laurel Jessamine 702064; third, The Enoch Farm on Miss Wyoming 741451; fourth, W. N. W. Blayney on Wyoming Joy 746324; fifth, Wallace and E. G. Good on Orphean 719411; sixth, Leroy McWhorter & Son on Bonnie Blessing 671998; seventh, Goernandt Bros. on Princess Mischief 733542; eighth, B. T. Bartlett on Rosewood Repeater 677761; ninth, Carl Miller on Echo Lass 160th 695683; tenth, Heath & Pierson on Villisco Elect 707984; eleventh, Leroy McWharter & Son on Maples Fairfax 2nd 698276.

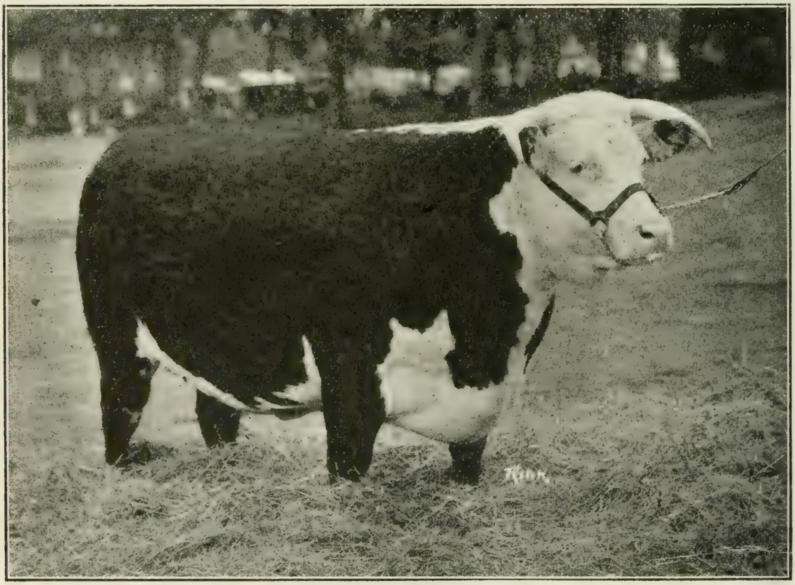
Heifer Senior Yearling—First, W. L. Yost on Bonnie Dorona 790696; second, Estate of G. E. Leslie on Dorothy Woodford 784188; third, Jesse Engle & Son on Belle Blanchard 82d 787283; fourth, Wallace and E. G. Good on Lady Donald 22d 782645; fifth, The Enochs Farm on Bessie Blanchard 781113; sixth, E. M. Cassady & Son on Maude Stanway 768275; seventh, Carl Miller on Echo Lass 160th A 761703; eighth, W. L. Yost on Bonnie Wauneta 790702; ninth, Turner Lumber & Investment Co. on Laurel Roseland 762245; tenth, Turner Lumber & Investment Co. on Belle Laurel 762231; eleventh, The Enochs Farm on Enoch's Princess 6th 775335; twelfth, W. L. Yost on Bonnie Valentine 790701; thirteenth, Jessie Engle & Son on Belle Blanchard 80th 787282.



FIRST PRIZE HEREFORD YOUNG HERD. W. L. YOST, KANSAS CITY, MO.

Heifer Junior Yearling—First, B. T. Bartlett on Teresa Repeater 808255; second, W. L. Yost on Sweet Avon 790720; third, Jesse Engle & Son on Belle Blanchard 85th 787287; fourth, Wallace and E. G. Good on Dora Fairfax 790765; fifth, R. F. Dougherty on Bonnie Highland 803209; sixth, Turner Lumber and Investment Co. on Laurel Vera 790728; seventh, W. L. Yost on Beauty Brae 790694; eighth, Ford's Hereford Farm on Marion Lass 16th 853304; ninth, Wallace and E. G. Good on Lady Donald 23d 818127; tenth, The Enochs Farm on Bonnie Blanchard 1st 810704; eleventh, Ford's Hereford Farm on Marion Lass 1st 796439; twelfth, Jessie Engle & Son on Belle Blanchard 83d 787284; thirteenth, Letts & Turkington on Lucy Dare 802921; fourteenth, Estate of G. E. Leslie on Susan Woodford 816839; fifteenth, Turner Lumber and Investment Co. on Laurel Mayflower 790729.

Heifer Senior Calf—First, W. L. Yost on Donna Brae 884098; second, Jesse Engle & Son on Princess 5th 886655; third, Estate of G. E. Leslie on Blanche Woodford 863181; fourth, B. T. Bartlett on Miss Bonnie Brae 842707; fifth, Estate of G. E. Leslie on Cora Woodford 896109; sixth, Jesse Engle & Son on Belle Blanchard 92nd 886650; seventh, Turner Lumber & Investment Co. on Laurel Pet 873592; eighth, E. M. Cassady & Son on Opal Stanway 2nd 853258; ninth, Ford's Hereford Farm on Repola Repeater 871082; tenth, W. L. Yost on Folly Brae 891605; eleventh, Turner Lumber & Investment Co. on Belle Laurel 5th 875294; twelfth, Carl Miller on Echo Lass 225th; thirteenth, Wm. McArthur on Nellie C 885235; fourteenth, R. F. Dougherty on Clara Lynn 893165.



LILY STANWAY.

Grand Champion Hereford Cow. E. M. Cassady & Sons, Whiting, Iowa.

Heifer Junior Calf—First, E. M. Cassady & Son on Queen Stanway 885395; second, W. L. Yost on Jeannie Brae 884107; third, Jesse Engle & Son on Belle Blanchard 91st 886649; fourth, Wallace and E. G. Good on Dorothy Best 898871; fifth, Letts & Turkington on Amelia Income 893399; sixth, Ford's Hereford Farm on Marion Lass 33rd 902843; seventh, The Enochs Farm on Anita Fairfax 892062; eighth, Ford's Hereford Farm on Marion

Lass 32nd 902849; ninth, Heath and Pierson on Villisca Lass 809419; tenth, W. L. Yost on Bonnie Braemore 884092; eleventh, Turner Lumber & Investment Co. on Belle Laurel 6th 909605; twelfth, Ford's Hereford Farm on Marion Lass 29th 902847; thirteenth, Carl Miller on Echo Lass 196th 885028; fourteenth, W. N. W. Blayney on Julia Wyoming 886254; fifteenth, Jesse Engle & Son on Belle Blanchard 96th.

Champion Bull Two Years or Over—First, Wallace and E. G. Good on Beau Best 890000; second, Estate of G. E. Leslie on Lord Dandy 560423.

Champion Bull Under Two Years—First, W. L. Yost on Avalanche 790693; second, W. N. W. Blayney on Wyoming 8th 775405.

Grand Champion Bull Any Age—Wallace and E. G. Good on Beau Best 890000.

Champion Cow Two Years Old or Over—E. M. Casady & Son on Lily Stanway 699128.

Champion Heifer Under Two Years—B. T. Bartlett on Teresa Repeater 808255.

Grand Champion Cow or Heifer Any Age—E. M. Cassady & Sons on Lily Stanway 699128.

Graded Herd—First, Wallace and E. G. Good; second, W. N. W. Blayney; third, B. T. Bartlett; fourth, Turner Lumber & Investment Co.; fifth, The Enochs Farm; sixth, Leroy McWharter & Son.

Breeders Young Herd—First, W. L. Yost; second, Jesse Engle & Son; third, Wallace and E. G. Good; fourth, Turner Lumber & Investment Co.; fifth, E. M. Cassady & Son; sixth, W. L. Yost; seventh, Ford's Hereford Farm.

Breeders Calf Herd—First, Estate of G. E. Leslie; second, Jesse Engle & Son; third, W. L. Yost; fourth, Wallace and E. G. Good; fifth, Jesse Engle & Son; sixth, W. L. Yost; seventh, E. M. Cassady & Son; eighth, Letts & Turkington; ninth, Turner Lumber & Investment Co.

Get of Sire—First, W. N. W. Blayney; second, W. L. Yost; third, Wallace and E. G. Good; fourth, Jesse Engle & Son; fifth, E. M. Cassady & Son; sixth, Turner Lumber & Investment Co.; seventh, Estate of G. E. Leslie; eighth, The Enochs Farm; ninth, Ford's Hereford Farm.

Produce of Cow—First, W. L. Yost; second, Jesse Engle & Son; third, W. N. W. Blayney; fourth, Wallace and E. G. Good; fifth, E. M. Cassady & Son; sixth, Jesse Engle & Son; seventh, The Enochs Farm; eighth, Ford's Hereford Farm; ninth, Turner Lumber & Investment Co.

IOWA AMATEUR HEREFORDS.

Exhibitors—M. W. Beatty, Valley Junction; Ford's Hereford Farm, Cedar Rapids; Heath & Pierson, Villisca; Letts & Turkington, Letts; Wm. McArthur, Mason City; R. G. McDuff, Monroe; Leroy McWhorter & Son, Burt.

Judge.................................Ward Miner, Whiting, Iowa

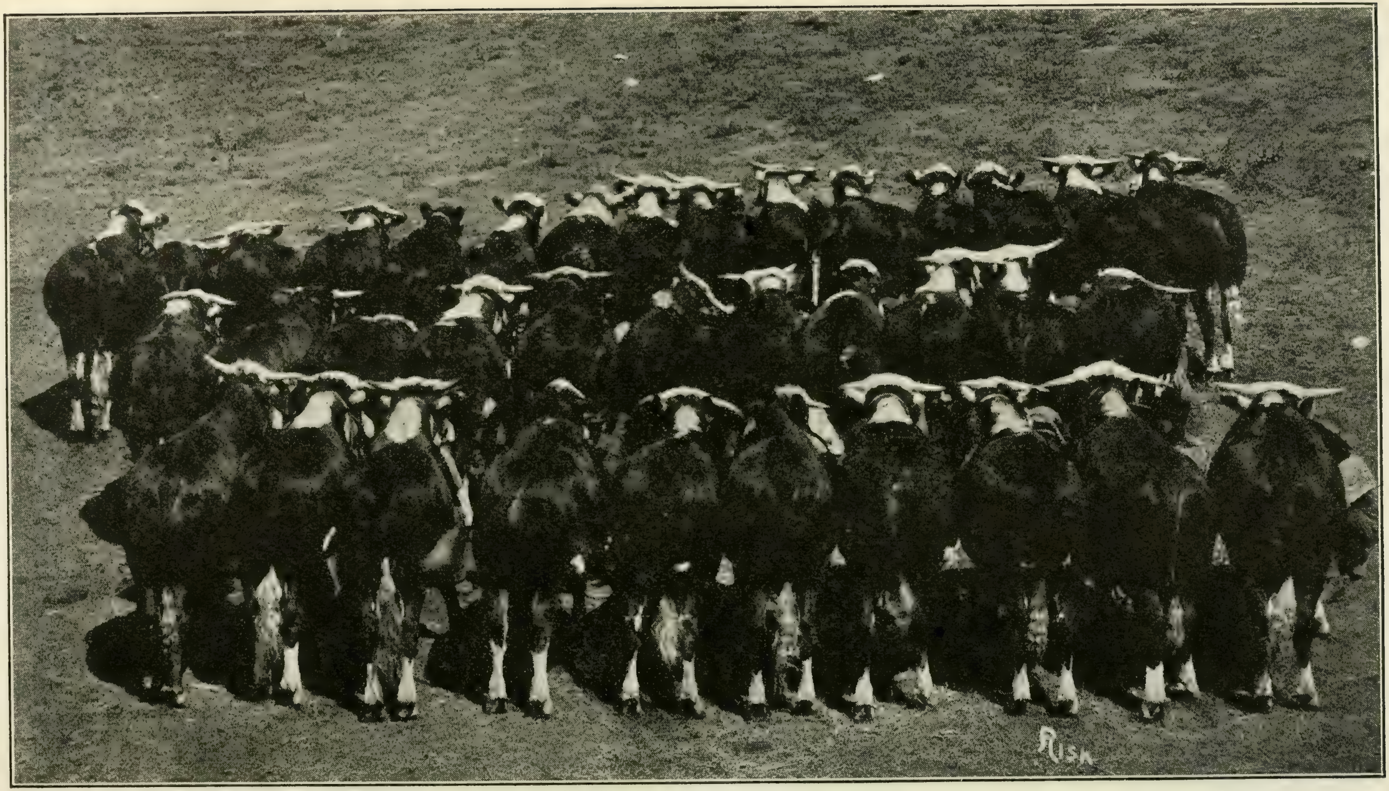
Bull Senior Yearling—First, Letts & Turkington on Incomparable 5th 760084; second, Wm. McArthur on Paladin B 791833.

Bull Junior Yearling—First, R. G. McDuff on Condo Fairfax 858074; second, Ford's Hereford Farm on Marion Lad 4th 797167; third, Letts & Turkington on Beau Income 802918; fourth, Heath & Pierson on Dandy Brae 15th 806420; fifth, M. W. Beatty on Rex Simon 841385; sixth, Heath & Pierson on Maples Dale 809420.

Bull Senior Calf—First, Letts & Turkington on Incomparable 8th; second, Heath & Pierson on Dandy Brae 18th 867860; third, Wm. McArthur on Bonnie Royal 885234.

Bull Junior Calf—Ford's Hereford Farm on Marion Lad 34th 902850; second, Ford's Hereford Farm on Marion Lad 27th 902840.

Heifer Two Years and Under Three—First, Leroy McWhorter & Son on Bonnie Blessing 671998; second, Leroy McWhorter & Son on Maple Fairfax 2nd 698276; third, Heath & Pierson on Villisca Elect 2nd 707984.



HEREFORD CLASS, IOWA BOYS AND GIRLS' MARKET CALF FEEDING CONTEST, 1920 IOWA STATE FAIR.

Heifer Senior Yearling—First, Wm. McArthur on Pansy A 818147; second, Heath & Pierson on Bonnie Lass 2nd 777909; third, R. C. McDuff on Sylvan Fairfax 5th 813183.

Heifer Junior Yearling—First, Letts & Turkington on Lucy Dare 802921; second, Ford Hereford Farm on Marion Lass 1st 796439; third, Heath & Pierson on Dandy Lass 809419; fourth, Ford's Hereford Farm on Marion Lass 16th 853304; fifth, M. W. Beatty on Annetta Simoon 877858; sixth, Letts & Turkington on Mildred Dare 802922.

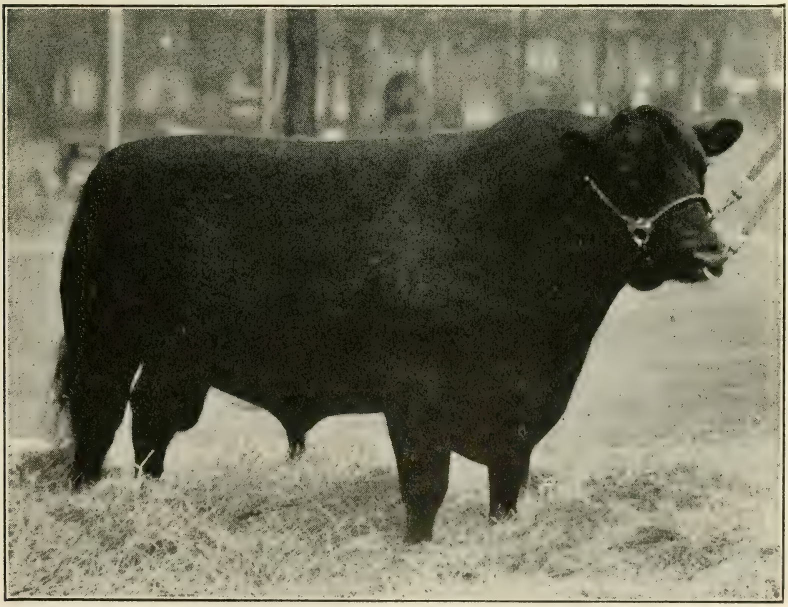
Heifer Senior Calf—First, Wm. McArthur on Nellie C 885235; second, Ford Hereford Farm on Repola Repeater 871082; third, Heath & Pierson on Dandy Lass 11th 867865; fourth, Wm. McArthur on Royal Lassie 885237; fifth, R. C. McDuff on Sunbeam Fairfax; sixth, Harold Leonard on Lou Bullion.

Heifer Junior Calf—First, Ford Hereford Farm on Marion Lass 32nd 902849; second, Letts & Turkington on Amelia Income 893399; third, Letts & Turkington on Martha Dare 893407; fourth, Ford's Hereford Farm on Marion Lass 33rd 902843; fifth, Ford's Hereford Farm on Marion Lass 29th 902847; sixth, Heath & Pierson on Dandy Lass 14th 909452.

County Group to Consist of Four Animals, Any Age or Sex, Shown by One Exhibitor or from same County—First, Leroy McWhorter & Son; second, Ford's Hereford Farm; third, Heath & Pierson; fourth, Letts & Turkington.

ABERDEEN ANGUS.

Exhibitors—J. Auracher, Shenandoah; R. R. Blake, Dallas Center; E. S. Bishop, Wellman; D. D. Barr & Son, Sanford, Colo.; Will Christenson, Lone Rock; Escher & Ryan, Irwin; John H. Fitch, Lake City; Miles Gardner, Hamlin; J. E. Garrity, DeWitt; Hess & Brown, Waterloo; Hartnell & Lang, Stacy-



BAR MARSHALL.

Grand Champion Aberdeen Angus Bull. Escher & Ryan, Irwin, Iowa.

ville; Kemp Bros., Marion; R. W. Plummer, Marshalltown; Carl A. Rosenfeld, Kelly.

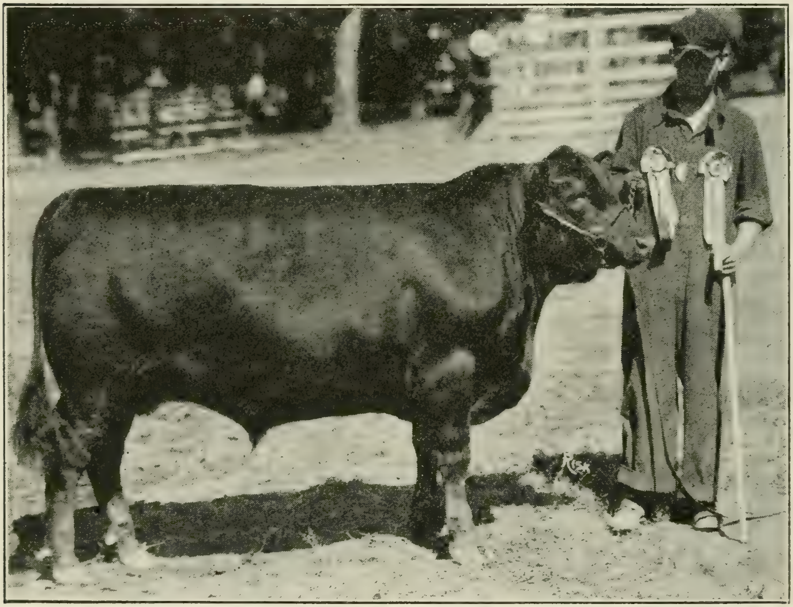
JUDGE............................W. J. KENNEDY, Sioux City, Iowa

Bull Three Years or Over—First, Escher & Ryan on Bar Marshall 229185; second, R. W. Plummer on Black Benz 2nd 204481; third, Will Christensen on Elmland Adam 199687; fourth, J. E. Garrity on Thick Set Pedro 205979.

Bull Two Years and Under Three—First, John H. Fitch on Koran 2nd 260090; second, Kemp Bros. on Quaker Lad K 281346; third, John H. Fitch on Enticer 2nd 279270; fourth, J. Auracher on Shenandoah Eli 290924; fifth, Miles Gardener on Englewood 2nd 272175.

Bull Senior Yearling—First, Escher & Ryan on Blackcap Eston 305730; second, Miles Gardner on Brownell 288534; third, D. D. Barr & Son on Eran 291538.

Bull Junior Yearling—First, Escher & Ryan on Blackcap Revolution 287269; second, R. W. Plummer on Egret 299205; third, E. S. Bishop on Eckhoff 298566; fourth, Hartnell & Long on Eorta 303160; fifth, R. W. Plummer on Maisencore Mike; sixth, E. S. Bishop on Beloit B 298565; seventh, Miles Gardner on Bar Eni 307865; eighth, Carl A. Rosenfield on Blackcap Brono 293814; ninth, R. R. Blake on Blackbird Special 299761.



QUAKER LAD.

First Prize Aberdeen Angus, Champion Over All Breeds, Iowa Boys and Girls' Stock Feeding Contest. Henry Haddock, Rhodes, Iowa.

Bull Senior Calf—First, Carl A. Rosenfield on Erivan 319162; second, John H. Fitch on Besto 302443; third, Escher & Ryan on Black Marshall 3d; fourth, R. W. Frank; fifth, Hess & Brown on Belmar's Black Cap 302297; sixth, R. W. Frank; seventh, Carl A. Rosenfield on Bardell 319160; eighth, Will Christenson on Blackcap Brewster 310704; ninth, Escher & Ryan on Black Marshall 4th; tenth, Hess & Brown on Etroclan.

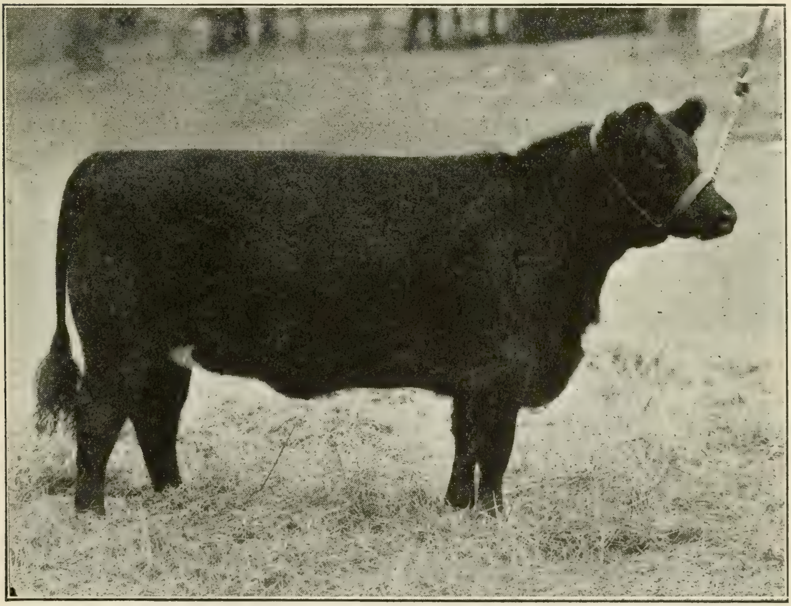
Bull Junior Calf—First, R. W. Plummer on Blackcap Coleman; second, Escher & Ryan on Prince Marshall 3rd; third, Hess & Brown on Echland

2nd of Quietdale 318947; fourth, Escher & Ryan on Bar Marshall 4th; fifth, E. S. Bishop on Erin of Clear Brook; sixth, R. R. Blake; seventh, E. S. Bishop on Blackcap of Clear Brook.

Cow Three Years or Over—First, John H. Fitch on Pride of Vista 3rd 211856; second, R. W. Plummer on Glenmore 121st 198230; third, Escher & Ryan on Ericer 17th of Greenview 177109; fourth, Hartnell & Lang on Blackbird Sara 246447; fifth, Will Christenson on Blackbird 148th 178289.

Heifer Two Years and Under Three—First, R. W. Plummer on Blackbird of Glyn Mawr 2nd 264593; second, John H. Fitch on Enquiry of Glyn Mawr 5th 264597; third, Will Christenson on Blackbird of Quietdale 74th 267199; fourth, Miles Gardner on Barbara Brownell 273206; fifth, John H. Fitch on Kokana 260081; sixth, D. D. Barr & Son on Prizenora 278695; seventh, Escher & Ryan on Blackbird Jessie 7th 270755.

Heifer Senior Yearling—First, Escher & Ryan on Blackbird Progress 6th 287260; second, E. S. Bishop on Blackcap of Quietdale 4th 276834; third, Hartnell & Lang on Black Petal 2nd 288567; fourth, Escher & Ryan on Pride Perfection 8th 287262; fifth, Miles Gardner on Blackbird Roberts 39th 312062; sixth, E. S. Bishop on Estelline B. 298562; seventh, Will Christenson on Elslow D 2nd 283357.



QUEEN'S VIOLA K.

Grand Champion Angus Cow. Kemp Bros., Marion, Iowa.

Heifer Junior Yearling—First, Escher & Ryan on Queen Missie 287267; second, Hess & Brown on Blackbird of Quietdale 82nd 295623; third, R. W. Plummer on Blackeyes Elgona 304998; fourth, John H. Fitch on Blackbird of Quietdale 79th 295611; fifth, Escher & Ryan on Pride Perfection 9th 287266; sixth, John H. Fitch on Brazilla (twin) 309292; seventh, Lee Leonard on Lassie Blackie 308672; eighth, E. S. Bishop on Escona 304650; ninth, John H. Fitch on Brazilla (twin) 309293; tenth, Ralph Leonard on Quilla S 4th 308675.

Heifer Senior Calf—First, Kemp Bros. on Queens Viola K 306800; second, Kemp Bros. on Glenrock Viola 2nd 306797; third, Carl A. Rosenfield on

Blackbird Dinah 319163; fourth, Hess & Brown on Blackcap of Quietdale 10th 302293; fifth, Will Christenson on Pride of Edenhurst 5th 310733; sixth, E. S. Bishop on Belvidere of Clearbrook 304670; seventh, Carl A. Rosenfield on Eurelda 316288; eighth, John H. Fitch on Keyota 309298; ninth, R. W. Frank; tenth, R. W. Frank on Eris 2nd 319068.

Heifer Junior Calf—First, R. W. Plummer on Elena; second, R. W. Frank; third, Hess & Brown on Everelda of Quietdale; fourth, Carl Rosenfield on Enama 5th 319165; fifth, Escher & Ryan on Blackcap Empress 3rd; sixth, R. W. Frank on Elba B. 319329; seventh, Hartnell & Lang on Enamma of Eulaine 317675; eighth, Escher & Ryan on Pride Perfection 12th; ninth. Will Christenson; tenth, Miles Gardner on Barbara Brownell 4th.

Champion Bull Two Years Old or Over—Escher & Ryan on Bar Marshall 229185.

Champion Bull Under Two Years—Escher & Ryan on Blackcap Revolution 287269.

Grand Champion Bull Any Age—Escher & Ryan on Bar Marshall 229185.

Champion Cow Two Years Old or Over—R. W. Plummer on Blackbird of Glynn Mawr 264593.

Champion Heifer Under Two Years—Kemp Bros. on Queen Viola K. 306800.

Grand Champion Cow Any Age—Kemp Bros. on Queen's Viola K. 306800.

Graded Herd—First, R. W. Plummer; second, Escher & Ryan; third, John H. Fitch; fourth, Will Christenson.

Breeder's Young Herd—First, Escher & Ryan; second, E. S. Bishop; third, John H. Fitch.

Breeders Calf Herd—First, Carl A. Rosenfield; second, Hess & Brown; third, Carl A. Rosenfield; fourth, Escher & Ryan; fifth, R. W. Frank; sixth, R. W. Frank; seventh, E. S. Bishop.

Get of Sire—First, Escher & Ryan; second, Carl A. Rosenfield; third, Escher & Ryan; fourth, E. S. Bishop; fifth, R. R. Blake.

Produce of Cow—First, Escher & Ryan; second, Escher & Ryan; third, Hess & Brown; fourth, Escher & Ryan; fifth, Escher & Ryan; sixth, R. R. Blake; seventh, John H. Fitch.

IOWA AMATEUR ABERDEEN ANGUS.

EXHIBITORS—J. Auracher, Shenandoah; E. S. Bishop, Wellman; R. R. Blake, Dallas Center; Will Christenson, Lone Rock; Hartnell & Lang, Stacyville; Calvin Korns, Hartwick; Nelson Korns, Hartwick.

JUDGE................................WM. MILNE, Mt. Pleasant, Iowa

Bull Two Years and Under Three—First, J. Auracher on Shenandoah Eli.

Bull Junior Yearling—First, E. S. Bishop; second, E. S. Bishop; third, R. R. Blake on Blackbird Special 299761.

Bull Senior Calf—First, Will Christenson on Blackcap Brewster 310704.

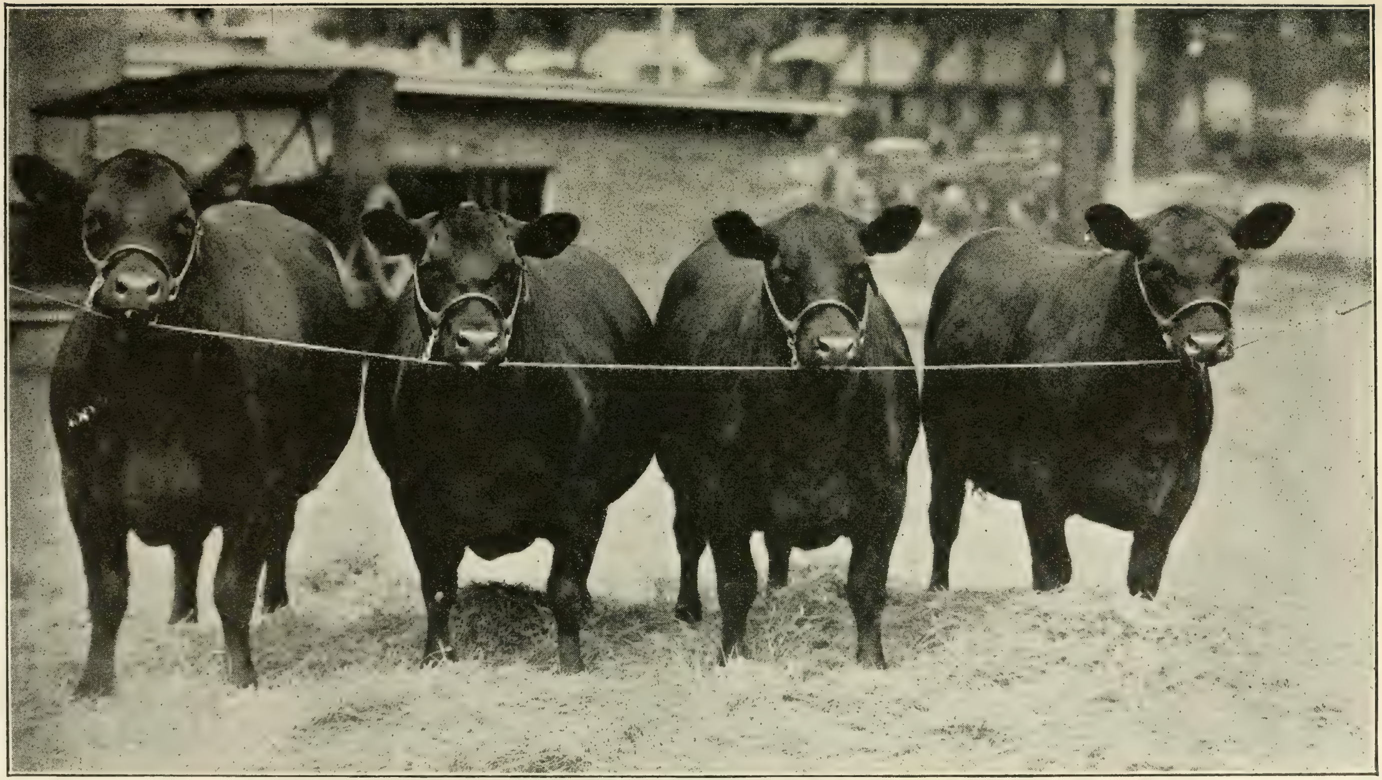
Bull Junior Calf—First, R. R. Blake; second, E. S. Bishop; third, E. S. Bishop.

Heifer Two Years and Under Three—First, Will Christenson on Blackbird of Quietdale 74th 267199.

Heifer Senior Yearling—First, E. S. Bishop; second, Will Christenson on Evergreen Esthonia 5th 290447; third, E. S. Bishop; fourth, Will Christenson on Elson D 2nd 283357.

Heifer Junior Yearling—First, Lee Leonard on Quilla S. 4 308675; second, Nelson Korns on Walnut Dell Queenette 5th 303587; third, E. S. Bishop; fourth, Calvin Korns on Walnut Dell Edna 10th 503585; fifth, Ralph Leonard on Lassie Blackie 308672.

Heifer Senior Calf—First, Will Christenson on Pride of Edenhurst 5th; second, E. S. Bishop; third, E. S. Bishop; fourth, R. R. Blake on Lady Nevas; fifth, R. R. Blake on Blackbird Lassie of Walnut Creek.



FIRST PRIZE GROUP OF FOUR, AMATEUR ABERDEEN ANGUS. WILL CHRISTENSON, LONE ROCK, IOWA.

Heifer Junior Calf—First, Will Christenson.

Group of Four Animals Any Age or Sex Shown by One Exhibitor or from same County—First, Will Christenson; second, E. S. Bishop; third, R. R. Blake.

GALLOWAY.

EXHIBITORS—H. Croft, Medicine Lodge, Kan.; Paul Wolph, Nehawka, Neb.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa

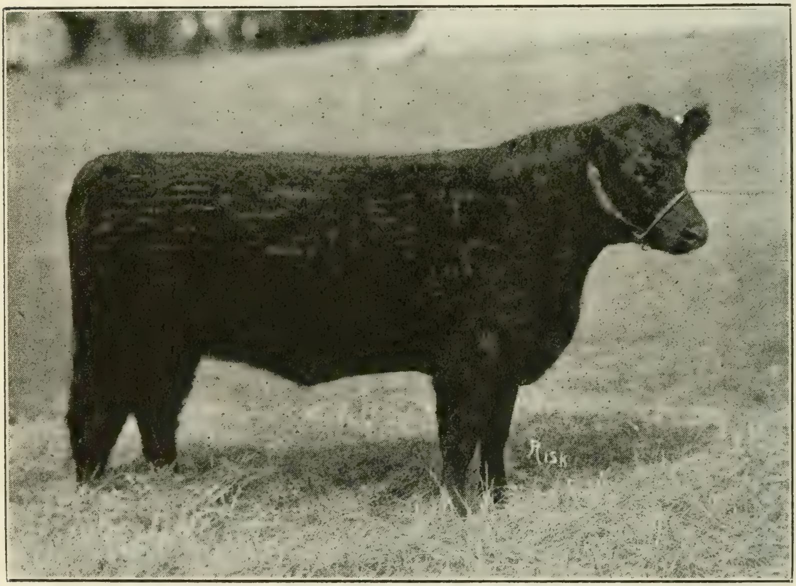
Bull Three Years or Over—First, Paul Wolph on Emperor of Drumlanrig (11673) 38304; second, H. Croft on Mendota 43138.

Bull Two Years Under Three—First, Paul Wolph on Worthy's Masterpiece 45170.

Bull Senior Yearling—First, Paul Wolph on Perfection 2nd 45171; second, H. Croft on Helen's Othello 46112.

Bull Junior Yearling—First, H. Croft on Idol Worthy 46509.

Bull Senior Calf—First, H. Croft on C. Carnot 46117; second, H. Croft on Jane's Othello 46116; third, Paul Wolph on The Clansman 46542.



CORA-COLA.

Grand Champion Galloway Cow. H. Croft, Medicine Lodge, Kan.

Bull Junior Calf—First, H. Croft on Optimist 47342; second, Paul Wolph on Ringmaster 3rd 47159; third, H. Croft on Figaro 46118.

Cow Three Years or Over—First, H. Croft on Lenora 3rd 41794; second, Paul Wolph on Hannah Carnot 38490.

Heifer Two Years Under Three—First, Paul Wolph on Miss Perfection 44007; second, H. Croft on Idolwell 2nd, 45837.

Heifer Senior Yearling—First, H. Croft on Clara-Cola 47375; second, Paul Wolph on Pretty Lassie 45174; third, H. Croft on Flo of Medicine Lodge 46418.

Heifer Junior Yearling—First, H. Croft on Molly Empress 46501; second, H. Croft on Clara of Medicine Lodge 46414; third, Paul Wolph on Malmo 2nd 46516.

Heifer Senior Calf—First, H. Croft on Cora-Cola 47132; second, Paul Wolph on Betty Jane 46541.

Heifer Junior Calf—First, H. Croft on Gay Empress 47134; second, Paul Wolph on Mary Marie 47160; third, Paul Wolph on Sister Perfection 47418.

Champion Bull Two Years Old or Over—Paul Wolph on Emperor of Drumlanrig 38304.

Champion Bull Under Two Years—H. Croft on Idolworthy 46507.

Grand Champion Bull Any Age—H. Croft on Idolworthy 46509.

Champion Cow Two Years or Over—H. Croft on Lenora 3rd 41794.

Champion Heifer Under Two Years—H. Croft on Cora-Cola 47132.

Grand Champion Cow or Heifer Any Age—H. Croft on Cora-Cola 47132.

Graded Herd—First, H. Croft; second, Paul Wolph.

Breeders Young Herd—First, H. Croft; second, Paul Wolph.

Breeders Calf Herd—First, H. Croft; second, Paul Wolph.

Get of Sire—First, H. Croft; second, H. Croft; third, Paul Wolph; fourth, Paul Wolph.

Produce of Cow—First, H. Croft; second, H. Croft; third, Paul Wolph; fourth, Paul Wolph; fifth, Paul Wolph.

POLLED SHORTHORN.

EXHIBITORS—R. W. Furnas, Letts; Aubert Hultine, Saronville, Neb.; Lloyd J. Loonan, Hudson; Edw. J. Lukavsky, Riverside; Powers Bros., Oxford; S. W. Stewart & Son, Kennard, Neb.; P. P. Strandgaard, Berwick; E. H. Spaulding & Sons, Westfield; J. J. Williams & Son, Grandview.

JUDGE.....................................WM. REES, Pilger, Neb.

Bull Three Years or Over—First, R. W. Furnas on Rosebud Charmer 780603; second, Powers Bros. on Gloster Goods 15656.

Bull Two Years Under Three—First, Albert Hultine on Lord Barmpton 18950; second, P. P. Strandgaard on Humdal 21857; third, P. P. Strandgaard on Thos. X. 21831.

Bull Senior Yearling—First, S. W. Stewart & Son on Belle Lavender 2113; second, Edw. J. Lukavsky on Craibstone Duke 823137.

Bull Junior Yearling—First, J. J. Williams & Son on Village Czar; second, Edw. J. Lukavsky on Royal Villager 824158; third, E. H. Spaulding & Sons on Royal Gauntlet S. H. 886497; fourth, Albert Hultine on Field Goods 21508.

Bull Senior Calf—First, S. W. Stewart & Son on Royal's Cumberland 21792; second, Albert Hultine on Orange King 21513; third, S. W. Stewart & Son on Royal's Senator 21793; fourth, E. H. Spaulding & Sons on Ridgeview Victor; fifth, J. J. Williams & Son on The Ruler.

Bull Junior Calf—First, Albert Hultine on Silver Dale 21862; second, Albert Hultine on Count Barmpton 21864; third, S. W. Stewart & Son on Royal Butterfly 21794; fourth, R. W. Furnas on Symmetrical; fifth, E. H. Spaulding & Sons on Index.

Cow Three Years or Over—First, Albert Hultine on Gloster Countess 2nd 795; second, S. W. Stewart & Son on The Wallflower 239316; third, E. H. Spaulding on Lassie 222934; fourth, P. P. Strandgaard on Lorene 153640.

Heifer Two Years Under Three—First, Albert Hultine on Gloster Princess 41st 4109; second, J. J. Williams & Son on Fairest Lady 6498; third, E. H. Spaulding & Sons on Roanne 786366; fourth, E. H. Spaulding & Sons on Betty 786363.

Heifer Senior Yearling—(No entries).

Heifer Junior Yearling—First, Albert Hultine on Victoria Rose 2nd 8366; second, Albert Hultine on Select Fern 2nd 8365; third, J. J. Williams & Son on Princess Royal 67th; fourth, S. W. Stewart & Son on Royal Pride 9550; fifth, J. J. Williams & Son on Gloster Sultana 3rd; sixth, B. W. Furnas on Germania 6th 7638.

Heifer Senior Calf—First, S. W. Stewart & Son on Royal Elizabeth 9549; second, Albert Hultine on Lady Fashion 9137; third, S. W. Stewart & Son on Royal Belle 9545; fourth, J. J. Williams & Son on Glory's Blossom; fifth, J. J. Williams & Son on Merry Ordens.

Heifer Junior Calf—First, Albert Hultine on Countess Duchess 9135; second, J. J. Williams & Son on Annabelle 3rd 2119; third, B. W. Furnas on Germanica 7th.

Champion Bull Two Years Old or Over—Albert Hultine on Lord Barmpton 18950.

Champion Bull Under Two Years—S. W. Stewart & Son on Belle's Lavender 2113.

Grand Champion Bull Any Age—Albert Hultine on Lard Barmpton 18950.

Champion Cow Two Years Old or Over—Albert Hultine on Gloster Countess 2nd 795.

Champion Heifer Under Two Years—First, Albert Hultine on Victoria Rose 2nd 8366.

Grand Champion Cow or Heifer Any Age—Albert Hultine on Gloster Countess 795.

Graded Herd—First, Albert Hultine.

Breeders' Young Herd—First, Albert Hultine; second, S. W. Stewart & Son; third, J. J. Williams & Son; fourth, Edw. J. Lukavsky.

Breeders' Calf Herd—First, S. W. Stewart & Son; second, Albert Hultine; third, J. J. Williams & Son; fourth, Edw. J. Lukavsky.

Get of Sire—First, Albert Hultine; second, S. W. Stewart & Son; third, Albert Hultine; fourth, J. J. Williams & Son; fifth, S. W. Stewart & Son.

Produce of Cow—First, Albert Hultine; second, S. W. Stewart & Son; third, J. J. Williams & Son; fourth, B. W. Furnas; fifth, E. H. Spaulding & Sons.

RED POLLED.

EXHIBITORS—Geo. Haussler & Sons, Holbrook, Neb.; W. S. Hill, Alexandria, S. D.; J. W. Larabee, Earlville, Ill.

JUDGE................................ELLIOTT DAVIS, Holbrook, Neb.

Bull Three Years or Over—First, J. W. Larabee on Antone Charmer 32299; second, W. S. Hill on Teddy's Perfection 24538.

Bull Two Years Under Three—First, Geo. Haussler & Sons on Ideal Charmer 34530; second, J. W. Larabee on Joseph Charmer 34443; third, W. S. Hill on Austin 34548.

Bull Senior Yearling—First, W. S. Hill on Victor 2nd 36665.

Bull Junior Yearling—First, Geo. Haussler & Sons on National Type 37498; second, W. S. Hill on Bishop 36670; third, J. W. Larabee on Tonie Charmer 37460.

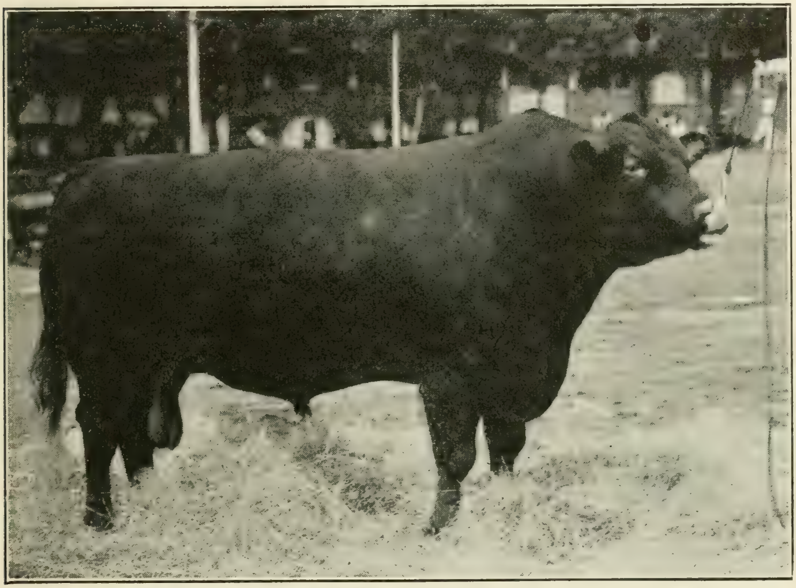
Bull Senior Calf—First, Geo. Haussler & Sons on Charmer's Model 38884; second, W. S. Hill on Burle 38463; third, J. W. Larabee on Harry Charmer 40346; fourth, Geo. Haussler & Sons on Superb Charmer 38885; fifth, W. S. Hill on Judson 40443.

Bull Junior Calf—First, J. W. Larabee on House Charmer 40347; second, W. S. Hill on Warren 40456.

Cow Three Years or Over—First, J. W. Larabee on Lady Neckton 44743; second, W. S. Hill on Plum 38579; third, Geo. Haussler & Sons on Sunana 38957; fourth, W. S. Hill on Nettie 38188.

Heifer Two Years and Under Three—First, J. W. Larabee on Bula Charmer 50252; second, W. S. Hill on Constance 50604; third, W. S. Hill on Dainty 47909; fourth, Geo. Haussler & Son on Upland Prairie Rose 53140.

Heifer Senior Yearling—First, Matie Charmer 53389; second, W. S. Hill on Bimba 52348; third, Geo. Haussler & Sons on U Queen 54638; fourth, Geo. Haussler & Sons on Susie B 53139; fifth, W. S. Hall on Fulda 52347.



ANTONE CHARMER.

Grand Champion Red Polled Bull. J. W. Larabee, Earlville, Ill.

Heifer Junior Yearling—First, J. W. Larabee on Mamie Charmer 53388; second, Geo. Haussler & Sons on U Uina 55096; third, J. W. Larabee on Lady Antone 53386; fourth, W. S. Hill on Peach 2nd 56739.

Heifer Senior Calf—First, Geo. Haussler & Son on U Lady Surprise 55102; second, W. S. Hill on Dorothy 57064; third, J. W. Larabee on Fancy 56949; fourth, Geo. Haussler & Son on U. Susie B 55100; fifth, J. W. Larabee on Vera Charmer 56950.

Heifer Junior Calf—First, J. W. Larabee on Eva 56953; second, J. W. Larabee on Millie Charmer 56951; third, W. S. Hill on Victorine 57065; fourth, Geo. Haussler & Sons on U. Josie 57108; fifth, Geo. Haussler & Sons on U. Lady Dorcas 57109.

Champion Bull Two Years Old or Over—First, J. W. Larabee on Antone Charmer 32299.

Champion Bull Under Two Years—Geo. Haussler & Son on Charmer's Model 38884.

Grand Champion Bull Any Age—J. W. Larabee on Antone Charmer 32299.

Champion Cow Two Years or Over—J. W. Larabee on Lady Neckton 44743.

Champion Heifer Under Two Years—J. W. Larabee on Mamie Charmer 53388.

Minded Children, Glenwood; State Hospital for Epileptics, Woodward; Cherokee Grand Champion Cow Any Age—J. W. Larabee on Lady Neckton 44743.

Graded Herd—First, J. W. Larabee; second, Geo. Haussler & Sons; third, W. S. Hill; fourth, W. S. Hill.

Breeders' Young Herd—First, J. W. Larabee; second, Geo. Haussler & Sons; third, W. S. Hill.

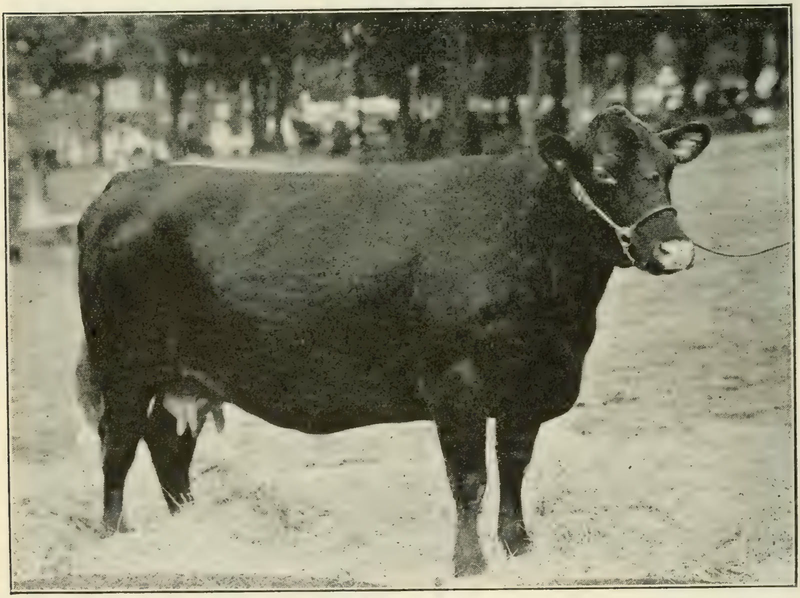
Breeders' Calf Herd—First, Geo. Haussler & Sons; second, J. W. Larabee; third, W. S. Hill; fourth, J. W. Larabee; fifth, Geo. Haussler & Sons.

Get of Sire—First, J. W. Larabee; second, Geo. Haussler & Sons; third, J. W. Larabee; fourth, Geo. Haussler & Sons; fifth, J. W. Larabee.

Produce of Cow—First, J. W. Larabee; second, J. W. Larabee; third, Geo. Haussler & Sons; fourth, Geo. Haussler & Sons; fifth, W. S. Hill.

HOLSTEIN.

Exhibitors—Geo. B. Appleman, Mulvane, Kan.; John Brauchle, Fort Dodge; Board of Control of State Institutions: Independence State Hospital, Independence; Reformatory, Anamosa; Clarinda State Hospital, Clarinda; State Sanatorium, Oakdale; Mt. Pleasant State Hospital, Mt. Pleasant; Institute for Feeble State Hospital, Cherokee; M. Breen & Son, Colfax; W. B. Barney & Son, Chapin; W. J. Bopp, Waterloo; Cass Farm Co., Sumner; John Cunningham, Waterloo; Cerro Gordo Farm, Mason City; J. M. Chestnut & Sons, Denison, Kan.; Collins and Van Horn, Sabetha, Kan.; H. B. Cowles, Topeka, Kan.; A. A. Dreyer, Whittemore; E. J. Erickson, Cambridge; O. L. Hamer, Waterloo; L. B. Hollister, Lone Rock; Hargrove & Arnold, Norwalk; B. C. Hemphill, Dexter; Iowana Farms, Davenport; Pete Johnson, Dike; Kansas Agricultural College, Manhattan; W. S. Leaverton & Son, Granger; C. F. C. Laage & Son, Algona; H. O. Larsen, Dike; Bert McCorkle & Son, Algona; W. H. McIntosh & Son, Dunker-



LADY NECKTON.

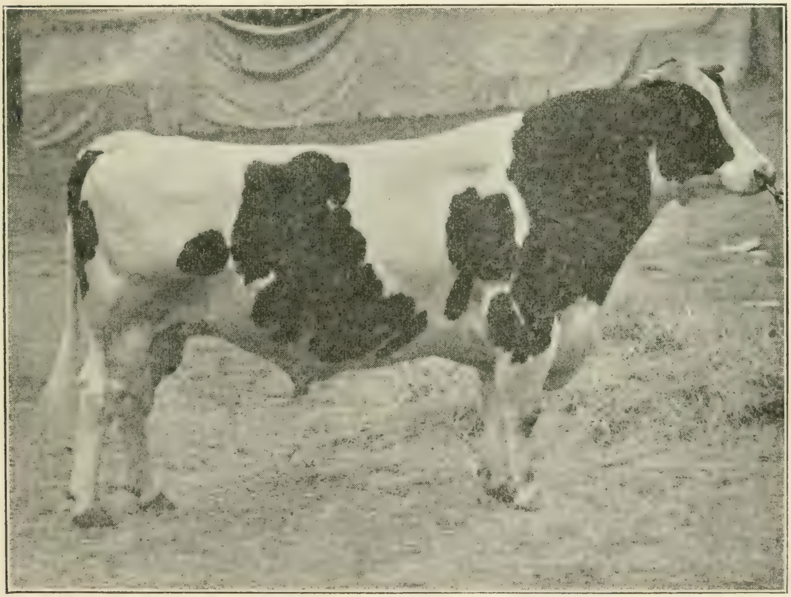
Grand Champion Red Polled Cow. J. W. Larabee, Earlville, Iowa.

ton; Maxwell Farms, Waterloo; Fred S. Miller, Waterloo; J. P. Mast, Scranton, Kan.; John Mails, Tonganoxie, Kan.; M. Del Parsons, Algona; C. M. Parker, Jesup; S. L. Strum, Janesville; W. R. Stubbs, Lawrence, Kan.; F. L. Thorpe, Algona; U. S. Disciplinary Barracks, Fort Leavenworth, Kan.; Wapsimoor Farm, Camanche.

JUDGE................................L. S. GILLETTE, Fostoria, Iowa

Bull Four Years or Over—First, U. S. Disciplinary Barracks on Johanna Bonheur Champ. 2nd 143420; second, Cass Farm Co. on King Aaggie Hengerveld 180842; third, W. B. Barney & Sons on Woodevest Sir Clyde 111260; fourth, Board of Control of State Institutions on Wolfspring Sethje Mooie Pontiac 182020; fifth, Board of Control of State Institutions on Sir Korndyke Haidee 123102.

Bull Three Years Under Four—First, Wapsimoor Farm on Sir Wapsie Flossmor 214179; second, C. M. Parker; third, Board of Control on Mudcura Aaggie Ormsby De Kol 220117; fourth, M. Breen & Son on King Buffalo Segis 211609.



JOHANNA BONHEUR.

Grand Champion Holstein Bull, U. S. Disciplinary Barracks, Fort Leavenworth, Kan.

Bull Two Years Under Three—First, Board of Control on King Peeterje Fayne Ormby 245382; second, Stubbs Farm Co. on King Fobes Genista Homestead 256655; third, Cass Farm Co. on Aaggie Almed Hengerveld 242191; fourth, Board of Control on King Pietertje Ormsby Piebe 3rd 238369.

Bull One Year Under Two—First, C. McCoy on U. S. Korn. Home Segis 258219; second, Cass Farm on Bessie Homestead Alcartia 269414; third, Wapsimoor Farm on Sir Joe 279258; fourth, Stubbs Farm Co. on King Korndyke Canary Homestead 272372; fifth, Board of Control on King Pietertje Ormsby Piebe 6th 253921; sixth, Board of Control on Sir Pietertje Korndyke Johanna's Sequal.

Bull Senior Calf—First, Cass Farm Co. on Hengeweld Walker Homestead 310724; second, Hargrove & Arnold on King Pieterje Ormsby Piebe 15th 294182; third, U. S. Disciplinary Barracks on U. S. Lona Hilldale Skylark Champion 301000; fourth, Hargrove & Arnold on King Piebe 290549; fifth, Board of Control on Cherokee Cornucopia; sixth, Cass Farm Co. on Fayne Mollie Walker.

Bull Junior Calf—First, John Cunningham on Joe Calama McKinley Pietje; second, J. P. Mast; third, Cass Farm Co. on King Aaggie Craddock 310726; fourth, Board of Control on King Fobes Ormsby Legis 313577; fifth, Board of Control on Woodward Daphine Pontiac; sixth, E. J. Erickson on Oak Dale Spring De Kol 11th.

Cow Four Years or Over—First, George Appleman on Irene Sarcastic De Kol 217325; second, Cass Farm Co. on Lulu Baby Girl 207085; third, Board of Control on May Belle Queen of Ceres III 261109; fourth, M. Breen & Son on Princess Concordia Legis 2nd 181224; fifth, Cass Farm Co. on Almeda Luecke Hengeweldt 5th 361622; sixth, U. S. Disciplinary Barracks on Rijaneta Inka Hengerveld 258705.

Cow Three Years and Under Four—First, Cass Farm Co. on Pearl Johanna De Kol Pontiac 536919; second, Board of Control on Lady Gerben Pauline 453028; third, John Cunningham; fourth, Board of Control on Pledge Korndyke II 415051; fifth, Board of Control on Lady Daphne Pambytuning; sixth, Board of Control on Oakdale Wickfield Colantha 388668.

Heifer Two Years Under Three—First, Stubbs Farm Co. on De Lava Mechthilde Fobes 410395; second, Stubbs Farm Co. on Ben Fobes Johanna De Kol 415626; third, U. S. Disciplinary Barracks on U. S. Poland Beauty Hengerveld 418304; fourth, Cass Farm Co. on Aaggie Hengerveld 445153; fifth, Cass Farm Co. on Aaggie Hengerveld Whitney 493818; sixth, Board of Control on Mechthilde Dummerston Celia 577106.

Heifer Senior Yearling—First, Cass Farm Co. on Bessie Homestead Jewel 501220; second, U. S. Disciplinary Barracks on Johanna Bonheur Juliana Inka 509439; third, U. S. Disciplinary Barracks on Johanna Bonheur Legis DeKol 503364; fourth, Cass Farm Co. on Queen Wannandee Beauty 501216; fifth, H. O. Larson on Forum Aaggie Beauty 523145; sixth, B. C. Hemphill on Roadside Rosalind 548981.

Heifer Junior Yearling—First, Cass Farm Co. on Bessie Homestead Walker 501226; second, Board of Control on Lady Pietje Mooie 577099; third, Kansas Agricultural College on Canary Paul Inka 503997; fourth, Fred S. Miller on Millercrest Johanna Legis 552326; fifth, Board of Control on Luxe Maid Pontiac 577101; sixth, Cass Farm Co. on Canary Bessie Homestead 501227.

Heifer Senior Calf—First, Cass Farm Co. on Fayne Glitha De Kol 587971; second, George Appleman; third, Cass Farm Co. on Ormsby Bessie Johanna 587976; fourth, Board of Control on Mercedes Korndyke Mooie 577104; fifth, H. O. Larsen on Forum Maud Masterpiece; sixth, Cass Farm Co. on Bessie Olcatha Pink 587968.

Heifer Junior Calf—First, Cass Farm Co. on Nervana Fayne Grace De Kol 556533; second, Board of Control; third, Board of Control on Cherokee Sarcastic; fourth, Fred S. Miller; fifth, Cass Farm Co. on Aggie Hengerveld 587969; sixth, H. B. Cowles on Wayne's Calf.

Champion Bull Two Years or Over—First, U. S. Disciplinary Barracks on Johanna Bonheur Champion 2d 143420.

Champion Bull Under Two Years—C. McCoy on U. S. Korndyke Homestead Legis 258219.

Grand Champion Bull Any Age—U. S. Disciplinary Barracks on Johanna Bonheur Champion 2nd 143420.

Champion Cow Two Years or Over—Geo. Appleman on Irene Sarcastic De Kol 217325.

Champion Heifer Under Two Years—Cass Farm Co. on Fayne Glitha De Kol 587971.

Grand Champion Cow, Any Age—Geo. Appleman on Irene Sarcastic De Kol 217325.

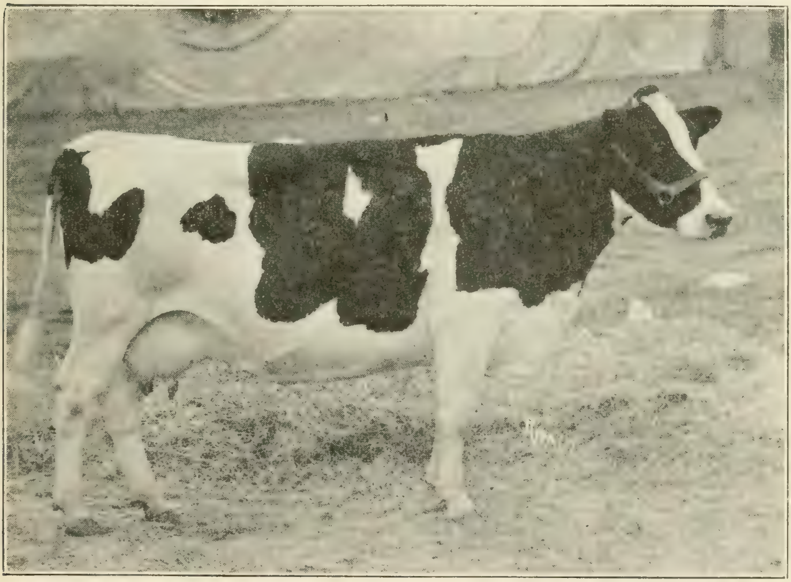
Graded Herd—First, U. S. Disciplinary Barracks; second, Cass Farm Co.; third, Board of Control; fourth, Cass Farm Co.

Breeders' Young Herd—First, Cass Farm Co.; second, Cass Farm Co.; third, B. C. Hemphill.

Breeders' Calf Herd—First, Cass Farm Co.

Get of Sire—First, Cass Farm Co.; second, Board of Control; third, Cass Farm Co.; fourth, Stubbs Farm Co.; fifth, Cass Farm Co.; sixth, Board of Control.

Produce of Cow—First, Kansas State Farm; second, Cass Farm Co.; third, Cass Farm Co.; fourth, H. O. Larson; fifth, Cass Farm Co.; sixth, Fred S. Miller.



IRENE SARCASTIC DE KOL.
Grand Champion Holstein Cow. Geo. B. Appleman, Mulvane, Kan.

Premier Exhibitor—Cass Farm Co.

Premier Breeder—Cass Farm Co.

Special Prizes—County Holstein Clubs—First, Bremer County; second, Black Hawk County.

IOWA AMATEUR HOLSTEIN.

EXHIBITORS—W. J. Bapp, Waterloo; John Cunningham, Waterloo; A. A. Dreyer, Whittemore; O. L. Homer, Waterloo; L. B. Hollister, Lone Rock; B. C. Hemphill, Dexter; H. O. Larson, Dike; Fred S. Miller, Waterloo; Bert McCorkle & Son, Algona; W. H. McIntosh & Son, Dunkerton; M. Del Parsons, Algona; F. L. Thorpe, Algona; Wapsimoor Farm, Camanche.

JUDGE................................C. L. BLACKMAN, Ames, Iowa

Bull Senior Yearling—First, Fred S. Miller; second, Wapsimoor Farm on Sir Joe 279258.

Bull Junior Yearling—First, W. S. Leaverton & Son on Sir Ormsby Korndyke Lass 312851; second, B. C. Hemphill on Roadside Pontiac Burke 306927.

Bull Senior Calf—First, Wapsimoor Farm; second, B. C. Hemphill on Roadside King Topsy; third, B. C. Hemphill on Roadside King Hester; fourth, B. C. Hemphill on Roadside King DeKol; fifth, B. C. Hemphill on Roadside Huldah Pietertje.

Bull Junior Calf—First, John Cunningham on Joe Calamo McKinley Pietje; second, Wapsimoor Farm.

Cow Four Years Old or Over—First, W. H. McIntosh & Son on Princess Segis Beet's DeKol 251957; second, B. C. Hemphill on Urmagel Rosalind 378450; third, Wapsimoor Farm on Miss Wapsie Josephine 337643.

Cow Three Years and Under Four—First, John Cunningham on Lady Wielske; second, Wapsimoor Farm on Wapsie Camille Ormsby 387097.

Heifer Two Years and Under Three—First, Fred S. Miller on Pietje Barbette Korndyke 440075.

Heifer Senior Yearling—First, B. C. Hemphill on Roadside Rosalind 548981; second, B. C. Hemphill on Roadside Nellie Burke 557333; third, John Cunningham on Lady Ormsby Spofford 3rd 523271; fourth, Wapsimoor Farm on Miss Wapsie Ollie 518998.

Heifer Junior Yearling—First, Fred S. Miller on Millercrest Johanna Legis 552326; second, W. S. Leaverton & Sons on Rose Burke Ormsby Piebe 576897; third, Fred S. Miller on Millercrest Legis Barostine 552327.

Heifer Senior Calf—First, W. J. Bopp; second, B. C. Hemphill on Roadside Mutual Canary; third, B. C. Hemphill on Roadside Mutual Belle; fourth, Wapsimoor Farm.

Heifer Junior Calf—First, Fred S. Miller; second, Pete Johnson.

Group of Four Animals, Any Age or Sex, Shown by One Exhibitor or from same county—First, Blackhawk County; second, Fred S. Miller; third, Wapsimoor Farm; fourth, B. C. Hemphill.

JERSEY.

Exhibitors—W. J. Campbell, Jesup; H. L. Elliott, Hopkins, Minn.; Maurice McMurray, Jesup; E. L. Reed, Ames; G. C. Sterling, Des Moines; Lloyd Sisson, Jesup; Will Thompson, Jesup.

Judge.................................C. L. Blackman, Ames, Iowa

Bull Four Years or Over—First, W. J. Campbell on Maxmillion You'll Do 149215.

Bull Three Years and Under Four—First, G. C. Stirling on Plymouth's Noble Lad 147756.

Bull Two Years and Under Three—(No entries).

Bull One Year and Under Two—First, H. L. Elliott on Golden Noble's Majesty 176626.

Bull Senior Calf—First, W. J. Campbell on You'll Do Bobbie; second, H. L. Elliott on Ida's Dundy Fox; third, H. L. Elliott on Countess Dandy King 182935; fourth, Lloyd Sisson on Fin Countess King 186047.

Bull Junior Calf—First, Maurice McMurray; second, H. L. Elliott on Pride's Chief Proudy 184663; third, G. C. Stirling.

Cow Four Years or Over—First, Maurice McMurray on Fox's Lucy of Ingleside 249995; second, G. C. Stirling on Golden Fern's Bosnia 271119; third, W. J. Campbell on Minnette's Golden Fern 222621; fourth, H. L. Elliott on Jolley's Easterbelle 357914; fifth, G. C. Stirling on Golden Fern's Primrose 384428.

Cow Three Years and Under Four—First, H. L. Elliott on Topsy's Cupid Jewel 407478; second, H. L. Elliott on Mayflower's Cupid Pride 389921; third, Will Thompson on Rioter's Fanny Rose 407634.

Heifer Two Years and Under Three—First, W. J. Campbell on Sweet Maria's Rhea 448599; second, H. L. Elliott on Jolly's Queen Lily 431059.

Heifer Senior Yearling—First, W. J. Campbell on Mable's Fin Marden 451157.

Heifer Junior Yearling—First, Maurice McMurray on Finantial Gambogess 463068; second, H. L. Elliott on Ethel's Noble Beauty; third, G. C. Stirling on Plymouth's Noble Fox; fourth, G. C. Stirling on You'll Do's Golden Aboukir; fifth, H. L. Elliott on Jewel's Judd Rosabella 450234.

Heifer Senior Calf—First, W. J. Campbel on You'll Do Lora; second, Maurice McMurray on Fin Countess Comity 480196; third, Lloyd Sisson on Fin Countess Kate 480877; fourth, G. C. Stirling on Pansy's Dahlia Blossom; fifth, Maurice McMurray; sixth, H. L. Elliott on Mayflower Noble Lass 2nd.

Heifer Junior Calf—First, Lloyd Sisson; second, G. C. Stirling; third, E. L. Reed; fourth, H. L. Elliott on Brendas Combination Bessie; fifth, H. L. Elliott on Jewel's Pagis Mayflower 479834; sixth, H. L. Elliott on Ethel's Chief Perfection 480252.

Champion Bull Two Years or Over—First, G. E. Stirling on Plymouth's Noble Lad 147756.

Champion Bull Under Two Years—H. L. Elliott on Golden Noble Majesty 176627.

Grand Champion Bull Any Age—First, H. L. Elliott on Golden Noble Majesty 176627.

Champion Cow Two Years or Over—Maurice McMurray on Fox's Lucy of Ingleside 249995.

Champion Heifer Under Two Years—W. J. Campbell on Mable's Financial Maiden 451157.

Grand Champion Cow Any Age—Maurice McMurray on Fox's Lucy of Ingleside 249995.

Graded Herd—First, W. J. Campbell.

Breeder's Young Herd—First, H. L. Elliott.

Breeder's Calf Herd—First, H. L. Elliott.

Get of Sire—First, Lloyd Sisson; second, H. L. Elliott.

Produce of Cow—First, W. J. Campbell; second, H. L. Elliott; third, G. C. Stirling; fourth, H. L. Elliott; fifth, H. L. Elliott.

Premier Exhibitor—H. L. Elliott.

Premier Breeder—H. L. Elliott.

IOWA AMATEUR JERSEYS.

Exhibitors—W. J. Campbell, Jesup; Maurice McMurray, Jesup; E. L. Reed, Ames; Lloyd Sisson, Jesup; G. C. Sterling, Des Moines; Will Thompson, Jesup.

Judge.................................C. L. Blackman, Ames, Iowa

Bull Senior Calf—First W. J. Campbell on You'll Do Bobbie; second, Lloyd Sisson on Fin Countess King 186047.

Bull Junior Calf—First, Maurice McMurray; second, G. C. Stirling.

Cow Four Years or Over—First, Maurice McMurray on Fox's Lucy of Ingleside 249995; second, G. C. Stirling on Golden Fern's Bosnia 271119; third, W. J. Campbell on Minnette's Golden Fern 222621; fourth, G. C. Stirling on Golden Fern's Primrose 384428.

Cow Three Years Under Four—First, Will Thompson on Rioter's Fancy Rose 407634.

Heifer Two Years Under Three—First, W. J. Campbell on Sweet Marie's Rhea 448599.

Heifer Senior Yearling—First, W. J. Campbell on Mable's Fin Maiden 451157.

Heifer Junior Yearling—First, Maurice McMurray on Finantial Gamboyes 463068; second, G. C. Stirling on Plymouth's Noble Fox; third, G. C. Stirling on You'll Do's Golden Aboukir.

Heifer Senior Calf—First, W. J. Campbell on You'll Do Lora; second, Maurice McMurry on Fin Countess Comity 480196; third, Lloyd Sisson on Fin Countess Kate 480872; fourth, G. C. Stirling on Pansy's Dahlia Blossom; fifth, Maurice McMurry.

Heifer Junior Calf—First, Lloyd Sisson; second, G. C. Stirling; third, E. L. Reed.

Group of Four Animals Any Age or Sex Shown by One Exhibitor or from same county—First, Buchanan County; second, W. J. Campbell; third, Buchanan County; fourth, G. C. Stirling.

GUERNSEY.

EXHIBITORS—W. O. Bohart, Bozeman, Mont.; Dairyland Farm, Storm Lake; Wm. J. Lockhart, Des Moines; Mountain Bros., Des Moines; W. W. Marsh, Waterloo; H. J. Schmidt, Cedar Falls; Elmer W. Stevenson, Jesup.

JUDGE............................W. A. MCKERROW, St. Paul, Minn.

Bull Four Years or Over—First, Mountain Bros. on Imp. Kitchener's Express 43925; second, W. O. Bohart on Estella's Major 24625.

Bull Three Years Under Four—First, W. W. Marsh on Cherub's Prince 41543; second, Dairyland Farm on Plato of 4 Pine 43396; third, Wm. J. Lockhart on Franseca's Glenwood of Iowanola 42490.

Bull Two Years, Under Three—First, W. W. Marsh on Marie's Cherub of the Prairie 48138; second, Dairyland Farm on Cloth of Gold's King 63595; third, W. O. Bohart on Prince Boy 52197.

Bull One Year Under Two—First, W. W. Marsh on Golden Laddie of the Prairie 60037; second, Dairyland Farm on Lalla's Prince 58845; third, Mountain Bros. on Simplicity's Winner of Iowanola 54404; fourth, H. J. Schmidt on Bobby Holden of Grand Home 59567; fifth, W. O. Bohart on Major Bozeman 58613; sixth, W. O. Bohart on Gallatin Major 63442.

Bull Senior Calf—First, W. W. Marsh on Blossom's Prince of the Prairie 60524; second, Mountain Bros. on Dorothy's Cherub of Iowanola 63495; third, W. W. Marsh on Prince Charming of the Prairie 60526; fourth, Mountain Bros. on Lilly's Express of Iowanola 63495; fifth, Mountain Bros. on Golden Master of Iowanola 63494; sixth, Dairyland Farm on Dairyland King.

Bull Junior Calf—First, Mountain Bros. on Lydia's Express of Iowanola 63498; second, W. W. Marsh; third, Mountain Bros. on May King's Cherub of Iowanola 63499; fourth, Dairyland Farm on Dairyland Renown; fifth, W. O. Bohart on Select's Major 63443; sixth, H. J. Schmidt on Rosette's Butternut King of G. H. 63550.

Cow Four Years or Over—First, Mountain Bros. on Engleside Pretoria Vrangue 68494; second, Dairyland Farm on Velma of Mapledell 63841; third, H. J. Schmidt on Marcus Glenwood's Dairy Daisy 46712; fourth, H. J. Schmidt on Glenwood Daisy's Rouge of Grand Home 64382; fifth, Mountain Bros. on May King's Recollection of Iowanola 51702; sixth, Dairyland Farm on Crystal of Floyd 31136.

Cow Three Years Under Four—First, Mountain Bros. on Elgleside Pretoria Queen 71111; second, W. W. Marsh on Princess Bopeep of the Prairie 89439; third, Mountain Bros. on Simplicity's Glenwood of Iowanola 76576; fourth, H. J. Schmidt on Highlife Victoria of Grand Home 72976; fifth, W. O. Bohart on Onward Girl 76682.

Heifer Two Years Under Three—First, Mountain Bros. on Lady Ruth of Iowanola 84517; second, Mountain Bros. on Imogene of Iowanola 80981; third, Dairyland Farm on Genevieve of Mapledell 94784; fourth, H. J. Schmidt on Glenwood Rosette's Rilma of Grand Home 87505; fifth, W. O. Bohart on Jane Onward 81286; sixth, W. O. Bohart on P. Lila Onward 85778.

Heifer Senior Yearling—First, W. W. Marsh on Honey Bloom of the Prairie 89451; second, Mountain Bros. on Dorothy Arnold of Iowanola 89183; third, W. W. Marsh on Golden Locks of the Prairie 89448; fourth, Mountain Bros. on Florinda's Lavetta of Iowanola 89184; fifth, W. W. Marsh on

Marsh Marigold of the Prairie 89445; sixth, Dairyland Farm on Nonpareil Cherry 103390.

Heifer Junior Yearling—First, W. W. Marsh on Princess Pretoria of the Prairie; second, Dairyland Farm on Dairyland Ruth 105395; third, H. J. Schmidt on Glenwood Daisy's Dairymaid of Grand Home 97063; fourth, Dairyland Farm on Fancy of Dairyland 105393; fifth, W. O. Bohart on Bozeman Pride 59647; sixth, W. O. Bohart on Major's O. L. 59646.

Heifer Senior Calf—First, Mountain Bros. on Kichener's Pet of Iowanola 102107; second, W. W. Marsh on Sensation of the Prairie 99872; third, W. W. Marsh on Honeydew of the Prairie 101492; fourth, W. W. Marsh on Primrose of the Prairie 99873; fifth, Mountain Bros. on Polly May Betty of Iowanola 103274; sixth, Dairyland Farm on Snow Flake of the Prairie 98514.

Heifer Junior Calf—First, W. W. Marsh on Mayflower of the Prairie; second, Dairyland Farm on Cloth of Gold's Beauty; third, Mountain Bros. on Cherub's Grace of Iowanola; fourth, W. O. Bohart on Major's Princess Lela; fifth, Dairyland Farm on Dairyland Janette; sixth, H. J. Schmidt on High Life's Clover Blossom of Grand Home 103347.

Champion Bull Two Years or Over—W. W. Marsh on Cherub's Prince 41543.

Champion Bull Under Two Years—W. W. Marsh on Golden Laddie of the Prairie 60037.

Grand Champion Bull Any Age—W. W. Marsh on Cherub's Prince 41543.

Champion Cow Two Years or Over—Mountain Bros. on Engleside Pretoria Vrangue 68494.

Champion Heifer Under Two Years—W. W. Marsh on Honey Bloom of the Prairie 89451.

Grand Champion Cow Any Age—Mountain Bros. on Engleside Pretoria Queen 68494.

Graded Herd—First, Mountain Bros.; second, Dairyland Farm; third, W. O. Bohart; fourth, W. O. Bohart.

Breeders' Young Herd—First, W. W. Marsh; second, Mountain Bros.; third, Dairyland Farm; fourth, W. O. Bohart.

Breeders' Calf Herd—First, W. W. Marsh; second, Mountain Bros.

Get of Sire—First, W. W. Marsh; second, Mountain Bros.; third, Mountain Bros.; fourth, Dairyland Farm; fifth, H. J. Schmidt; sixth, W. O. Bohart.

Produce of Cow—First, W. W. Marsh; second, Mountain Bros.; third, Dairyland Farm; fourth, Mountain Bros.; fifth, H. J. Schmidt; sixth, Dairyland Farm.

Premier Exhibitor—Mountain Bros.

Premier Breeder—W. W. Marsh.

IOWA AMATEUR GUERNSEY.

Exhibitors—Wm. J. Lockhart, Des Moines; H. J. Schmidt, Cedar Falls; Elmer W. Stevenson, Jesup.

Judge.................................C. L. Blackman, Ames, Iowa

Bull Two Years Under Three—(No entries).

Bull Junior Yearling—First, H. J. Schmidt on Bobby Holden of Grand Home 59567.

Bull Junior Calf—First, H. J. Schmidt on Rosette's Butternut King of Grand Home 63550.

Cow Four Years or Over—First, Wm. J. Lockhart on Imp. Daisy Belle of Fairview 40248; second, H. J. Schmidt on Marcus Glenwood's Daisy 46712; third, H. J. Schmidt on Glenwood Daisy's Rouge of Grand Home 64382; fourth, H. J. Schmidt on Marcus Glenwood's Rosette 46710.

Cow Three Years Under Four—First, H. J. Schmidt on High Life Victoria of Grand Home 72976.

Heifer Two Years Under Three—First, H. J. Schmidt on Glenwood Rosette's Rilma of Grand Home 87505.

Heifer Junior Yearling—First, H. J. Schmidt on Glenwood Daisy's Dairymaid of Grand Home 97063.

Heifer Senior Calf—First, H. J. Schmidt on Rouge's Rose of Grand Home 103346.

Heifer Junior Calf—H. J. Schmidt on High Life's Clover Blossom of Grand Home 103347.

Group of Four Animals Any Age or Sex Shown by One Exhibitor or from same county—First, H. J. Schmidt.

AYRSHIRE.

Exhibitors—Stephen Bull, Racine, Wis.; C. H. Peverill, Waterloo; Selmer O. Storby, Lake Mills.

Judge....................................J. B. Fitch, Manhattan, Kan.

Bull Three Years Under Four—First, Stephen Bull on Friendless Victor (Imp.) 21925.

Bull Two Years Under Three—First, C. H. Peverill on Cloverdale's Choice Goods 21763; second, C. H. Peverill on Cavalier's Fashion Plate 21222; third, Selmer O. Stanby on Silver Ring of South Farm 20968.

Bull One Year Under Two—First, C. H. Peverill on Rosebud Buster; second, Stephen Bull on Garclaugh Ivanhoe.

Bull Senior Calf—First, C. H. Peverill on Carl Rosebud; second, C. H. Peverill on Rose Bud Bell; third, Stephen Bull on Aldebaran Crest 24091.

Bull Junior Calf—First, Stephen Bull on Aldebaran Hugh 24655; second, C. H. Peverill on Cavalier's Good Gift; third, C. H. Peverill on Rosebud Lassie Boy.

Cow Four Years or Over—First, Stephen Bull on Craigley Ada (Imp.) 61902; second, C. H. Peverill on Enid Lessenessock 40618; third, C. H. Peverill on Slyva Good Gift 43327; fourth, Stephen Bull on Rose Genevieve of South Farm 46125; fifth, Stephen Bull on Rosie Noxemall 38687.

Cow Three Years Under Four—First, C. H. Peverill on Beauty of Cloverdale 46902.

Heifer Two Years Under Three—First, Stephen Bull on Hughina Beauty 58211; second, C. H. Peverill on Bess Ballard 40917; third, C. H. Peverill on Cherry Good Gift 55039; fourth, Stephen Bull on Aldebaran Ella 53332; fifth, Stephen Bull on Aldebaran Milkmaid 47916.

Heifer Senior Yearling—First, C. H. Peverill on Rosebud Nellie Carlton; second, Stephen Bull on Garclaugh Snow (Imp.) 61704; third, Stephen Bull on Violet Finlayston 2nd 54336; fourth, C. H. Peverill on Rosebud Stonehouse Lucy.

Heifer Junior Yearling—First, Stephen Bull on Aldebaran Blossom 57281; second, Stephen Bull on Aldebaran Delight 56931; third, C. H. Peverill on Rosebud Financier's Violet.

Heifer Senior Calf—First, Stephen Bull on Aldebaran Flirt 59214; second, C. H. Peverill on Rosebud Fair Beauty; third, Stephen Bull on Aldebaran Clementine 59246; fourth, C. H. Peverill on Rosebud Cherry Blossom.

Heifer Junior Calf—First, Stephen Bull on Aldebaran Victoria 62792; second, C. H. Peverill on Rosebud Nona; third, C. H. Peverill on Bessie's Pride.

Champion Bull Two Years or Over—First, C. H. Peverill on Cloverdale's Choice Goods 21763.

Champion Bull Under Two Years—C. H. Peverill on Rosebud Buster.

Grand Champion Bull Any Age—C. H. Peverill on Cloverdale's Choice Goods 21763.

Champion Cow Two Years Old or Over—Stephen Bull on Hughina Beauty 58211.

Champion Heifer Under Two Years—Stephen Bull on Aldebaran Flirt 59214.

Grand Champion Cow Any Age—Stephen Bull on Hughina Beauty 58211.

Graded Herd—First, Stephen Bull; second, C. H. Peverill; third, C. H. Peverill.

Breeders' Young Herd—First, C. H. Peverill; second, Stephen Bull.

Breeders' Calf Herd—First, C. H. Peverill.

Get of Sire—First, C. H. Peverill; second, Stephen Bull; third, C. H. Peverill; fourth, Stephen Bull.

Produce of Cow—First, C. H. Peverill; second, C. H. Peverill; third, C. H. Peverill.

Premier Exhibitor—C. H. Peverill.

Premier Breeder—C. H. Peverill.

SPECIAL PRIZE OFFERED BY THE AYRSHIRE BREEDERS' ASSOCIATION.

To the Exhibitor Winning Most Money on Single Aniamls Bred by Himself—C. H. Peverill.

Grand Champion Male—C. H. Peverill on Cloverdale's Choice Goods 21763.

Grand Champion Female—Stephen Bull on Hughina Beauty 58211.

BROWN SWISS.

Exhibitors—W. O. Bohart, Bozeman, Mont.; Mooney & Larrabee Bros., Fort Dodge.

Judge.................................J. B. Fitch, Manhattan, Kan.

Bull Three Years or Over—First, Mooney & Larrabee Bros. on Hefty Boy of Valley Grove 4038; second, Mooney & Larrabee Bros. on Carl the 6th 6166; third, W. O. Bohart on Sunny Hill Bob 6170; fourth, W. O. Bohart on Beauty 2nd Master 6004.

Bull Two Years Under Three—First, W. O. Bohart on Zell A. W. 7097; second, W. O. Bohart on Beauty C's N. M. 6815.

Bull One Year Under Two—First, W. O. Bohart on Tassa M's Nick 7357; second, Mooney & Larrabee Bros. on Czar L. 7697; third, W. O. Bohart on Tassa's Bob 7387; fourth, W. O. Bohart on Nick's Master 2nd 7362.

Bull Senior Calf—First, W. O. Bohart on Beauty 2nd Dick 8077; second, Mooney & Larrabee Bros. on Ceylon 2nd 7698; third, W. O. Bohart on D's Dick 7903.

Bull Junior Calf—First, Mooney & Larrabee Bros. on Howard; second, W. O. Bohart on Bozeman Boy 8080; third, W. O. Bohart on Master A's Bob; fourth, W. O. Bohart on Little Nick's Dick 8079.

Cow Four Years or Over—First, Mooney & Larrabee Bros. on Sally Verbruge 6821; second, W. O. Bohart on Master's Bernice 7489; third, W. O. Bohart on Master's Beauty C 7484.

Cow Three Years Under Four—First, Mooney & Larrabee Bros. on Chalfonte 9218; second, W. O. Bohart on Bowney's Perfection 8612.

Heifer Two Years Under Three—First, Mooney & Larrabee Bros. on Marie Gronyer 9919; second, Mooney & Larrabee Bros. on Jeanne L. 9922; third, W. O. Bohart on D's Tassa 10736; fourth, W. O. Bohart on Beauty D 9634.

Heifer Senior Yearling—First, Mooney & Larrabee Bros. on Little Anne 2nd 11061; second, W. O. Bohart on Bob's Mascott 10596; third, W. O. Bohart on Katherin's Heifer 10595; fourth, Mooney & Larrabee Bros. on Eiffle 2nd 11062.

Heifer Junior Yearling—First, W. O. Bohart on Nick's Alice C 10589; second, Mooney & Larrabee Bros. on Doddy Robbins 2nd 11064; third, Mooney & Larrabee Bros. on Jeannet 2nd 11070; fourth, W. O. Bohart on Nellie Deer 10593.

Heifer Senior Calf—First, Mooney & Larrabee Bros. on Little Egypt 2nd; second, W. O. Bohart on Dick's Charm 11376; third, Mooney & Larrabee Bros. on Janette L. 2nd; fourth, W. O. Bohart on Dick's Gallatin Girl 11377.

Heifer Junior Calf—First, W. O. Bohart on Dick's Nellie B. 11826; second, Mooney & Larrabee Bros. on Yuly 2nd; third, W. O. Bohart on Bob's D 2nd 11825; fourth, Mooney & Larrabee Bros. on Rowina 2nd.

Champion Bull Two Years Old or Over—First, Mooney & Larrabee Bros. on Hefty Boy of Valley Grove 4038.

Champion Bull Under Two Years—W. O. Bohart on Beauty 2nd Dick 8077.

Grand Champion Bull Any Age—Mooney & Larrabee Bros. on Hefty Boy of Valley Grove 4038.

Champion Cow Two Years or Over—Mooney & Larrabee Bros. on Marie Gronyer 9919.

Champion Heifer Under Two Years—W. O. Bohart on Nick's Alice C. 10589.

Grand Champion Cow or Heifer Any Age—Mooney & Larrabee Bros. on Marie Gronyer 9919.

Graded Herd—First, Mooney & Larrabee Bros.; second, W. O. Bohart; third, Mooney & Larrabee Bros.; fourth, W. O. Bohart.

Breeders' Young Herd—First, W. O. Bohart; second, Mooney & Larrabee Bros.; third, Mooney & Larrabee Bros.; fourth, W. O. Bohart.

Breeders' Calf Herd—First, Mooney & Larrabee Bros.; second, W. O. Bohart.

Get of Sire—First, Mooney & Larrabee Bros.; second, W. O. Bohart; third, Mooney & Larrabee Bros.; fourth, W. O. Bohart.

Produce of Cow—First, Mooney & Larrabee Bros.; second, W. O. Bohart; third, Mooney & Larrabee Bros.; fourth, W. O. Bohart.

Premier Exhibitor—W. O. Bohart.

Premier Breeder—W. O. Bohart.

FAT SHORTHORNS.

JUDGE.................................... H. H. KILDEE, Ames, Iowa

Pure Bred Steer, Spayed or Martin Heifer, Junior Yearling—First, W. B. Tague on Major Dale; second, F. C. Barber & Sons on Orphan Dale 833530; third, Dorothy & Herman Lohman on Marshal's Star; fourth, Dorothy & Herman Lohman on Marshal's Choice.

Pure Bred Steer, Spayed or Martin Heifer, Under One Year—First, F. C. Barber & Sons on Village Goods; second, W. M. Milne & Son on Javalin Jack; third, F. C. Barber & Sons on Price Starlight 867015.

Champion Steer, Spayed or Martin Heifer—W. B. Tague on Major Dale.

Group of Three Head Owned by Exhibitor—(No entry .

Grade or Cross Bred Steer, Spayed or Martin Heifer, Junior Yearling—First, Joseph Caputo on Roan Bob; second, Harold Pace on Roan Bud; third, Henry Haddock on Roan Bess; fourth, Orville Neville on Red Lad.

Champion Grade or Cross Bred Steer, Spayed or Martin Heifer—Joseph Caputo on Roan Bob.

FAT HEREFORDS.

JUDGE.................................... H. H. KILDEE, Ames, Iowa

Pure Bred Steer, Spayed or Martin Heifer Two Years and Under Three—First, E. M. Cassady & Son on Golden Boy 359.

Pure Bred Steer, Spayed or Martin Heifer, Senior Yearling—First, E. M. Cassady & Son on Baltimore Beach 630.

Pure Bred Steer, Spayed or Martin Heifer, Junior Yearling—First, W. N. W. Blayney on Stripe; second, W. N. W. Blayney on Curley Wyoming; third, Floyd Meyers on Beau Monkton 3rd; fourth, Morris Butler on Beaumon; fifth, Arnold Thiessen on Garfield 816141; sixth, Ford's Hereford Farm on Marion Lad 2nd 796435.

Pure Bred Steer, Spayed or Martin Heifer Under One Year—First, E. M. Cassady & Son on Bright Vern 358; second, W. L. Yost on Dandy Avon 305; third, Terrace Lake Hereford Park on Gay Repeater 890764.

Champion Steer, Spayed or Martin Heifer—First, E. M. Cassady & Son on Golden Boy 359.

Group of Three Head Owned by Exhibitor—E. M. Cassady & Son.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Junior Yearling—First, Virgil Sherwood on Nip; second, Wilbur Molison on Dynamite; third, Roy Bailey on Mike; fourth, Orville Neville on Prince.

Grade or Cross Bred Steer, Spayed or Martin Heifer Under One Year—First, Wallace and E. G. Good on Grandview Boy.

Champion Grade or Cross Bred Steer, Spayed or Martin Heifer—First, Wallace and E. G. Good on Grandview Boy.

FAT ABERDEEN ANGUS.

JUDGE.................................H. H. KILDEE, Ames, Iowa

Pure Bred Steer, Spayed or Martin Heifer, Senior Yearling—First, Hess & Brown on Proud Chief of Quietdale 276836.

Pure Bred Steeer, Spayed or Martin Heifer, Junior Yearling—First, Henry Haddock on Quaker Lad; second, Hess and Brown on Prime Lad of Quietdale 2034; third, Calvin Korns on Black Robin 2nd.

Pure Bred Steer, Spayed or Martin Heifer Under One Year—First, Hess & Brown on King Belmar 2072; second, D. D. Barr & Son on Colo Nugget 4th.

Champion Pure Bred Steer, Spayed or Martin Heifer—First, Henry Haddock on Quaker Lad.

Group of Three Head Pure Bred Owned by Exhibitor—First, Hess & Brown.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Senior Yearling—First, Escher & Ryan on Black Rock 4th; second, Carl A. Rosenfield on Charley Chaplin.

Grade or Cross Bred Steer, Spayed or Martin Heifer, Junior Yearling—First, Fon K. Irwin on Nig; second, Wilbur Molison on Spot; third, Harold Pace on Tom.

Grade or Cross Bred Steer, Spayed or Martin Heifer Under One Year—First, Carl A. Rosenfield on Inoque; second, Escher & Ryan on Marshall Boy 3rd.

Champion Grade or Cross Bred Steer, Spayed or Martin Heifer—First, Escher & Ryan on Black Rock 4th.

Group of Three Head Owned by Exhibitor Grade or Cross Bred—(No entry).

IOWA BOYS' AND GIRLS' MARKET CALF FEEDING CONTEST.

EXHIBITORS—Roy Bailey, Toledo; Roy Braun, Nichols; Archie Braun, Nichols; Harry Braun, Nichols; Cecil Bruce, Atlantic; Lynn Brennecke, Marshalltown; Morris Butler, Marshalltown; Ralph Beane, Legrand; Orville D. Caster, Defiance; Robert Collins, Liscomb; Joseph Caputa, Marshalltown; Elizabeth Carmichael, Stockport; Roy Crawford, Stockport; Dale G. Duncan, Ainsworth; Carl D. Davis, Iowa City; Oliver Douglas, Malcom; Cleo Dunham, Blakesburg; Berle Dunham, Blakesburg; Wayne Eckhardt, Muscatine; Edward E. Ehrecke, Montpelier; Maynard Eckhardt, Muscatine; Wilma Farley, Grinnell; Willie Friend.

Green Mountain; Ida Fricke, State Center; Marie Fricke, State Center; Vergil Haugen, McCallsburg; Gaylord Haugen, McCallsburg; Harry Haddock, Rhodes; Ernest Holmquist, Marshalltown; John Holmquist, Marshalltown; Willard Hauser, Albion; Leland Halter, Melbourne; Fon K. Irwin, New Virginia; Dennis Thomas Jones, Ainsworth; Glen James, Blakesburg; Everett Korns, Hartwick; Nelson Korns, Hartwick; Calvin Korns, Hartwick; Theodore Kemper, Fairport; Bernhardt Kemper, Fairport; Keith Kelley, Osceola; Kenneth King, Macksburg; Wilmer Lauderman, Washington; George Leonard, Perry; Earl Lamb, Malcom; Dorothy and Herman Lohman, West Point; Fred Lewellen, Lorimer; Eugene Martin, Crawfordsville; Verl Maxwell, Crawfordsville; Paul Maxwell, Crawfordsville; Georgie Marrow, Grinnell; Theo. Miller, Brooklyn; Frank Moninger, Marshalltown; Floyd Meyers, Lamoille; Wilbur Molison, Malcom; Lester W. Metz, Tama; Vincent McGowan, Fonda; John McGowan, Fonda; Charles McTee, Crawfordsville; Arthur McTee, Crawfordsville; Vaughn McDowell, Ottumwa; Orville Neville, Malcom; Roy Neiderhauser, Marshalltown; Harold Pace, Muscatine; Wayne Probst, West Liberty; Lester Plummer, Marshalltown; Leo Piper, Legrand; Delbert Rayl, Grinnell; Virgil Sherwood, Hartwick; Vernon Shepard, Muscatine; James Shepard, Muscatine; E. A. Stewart, Ainsworth; Hazel Shipton, Green Mountain; George Marion Smith, Panora; Esther C. Smith, Panora; Doyle Schultz, Macksburg; Forest Shafer, Tama; Lyman Dan Schmidt, Reinbeck; Arnold Thiessen, Stockton; Jennie Turner, DeWitt; John Turner, DeWitt; Willie Turner, DeWitt; Everett Verly, Grundy Center; Mary E. Verry, Iowa City; Raymond S. Wiley, Indianola; Pearl Wiley, Indianola; Clare Wiley, Indianola; Paul Wittrig, Crawfordsville; Cecil Waltemeyer, Melbourne, Percy Wendt, Green Mountain; Russell Wise, Ottumwa.

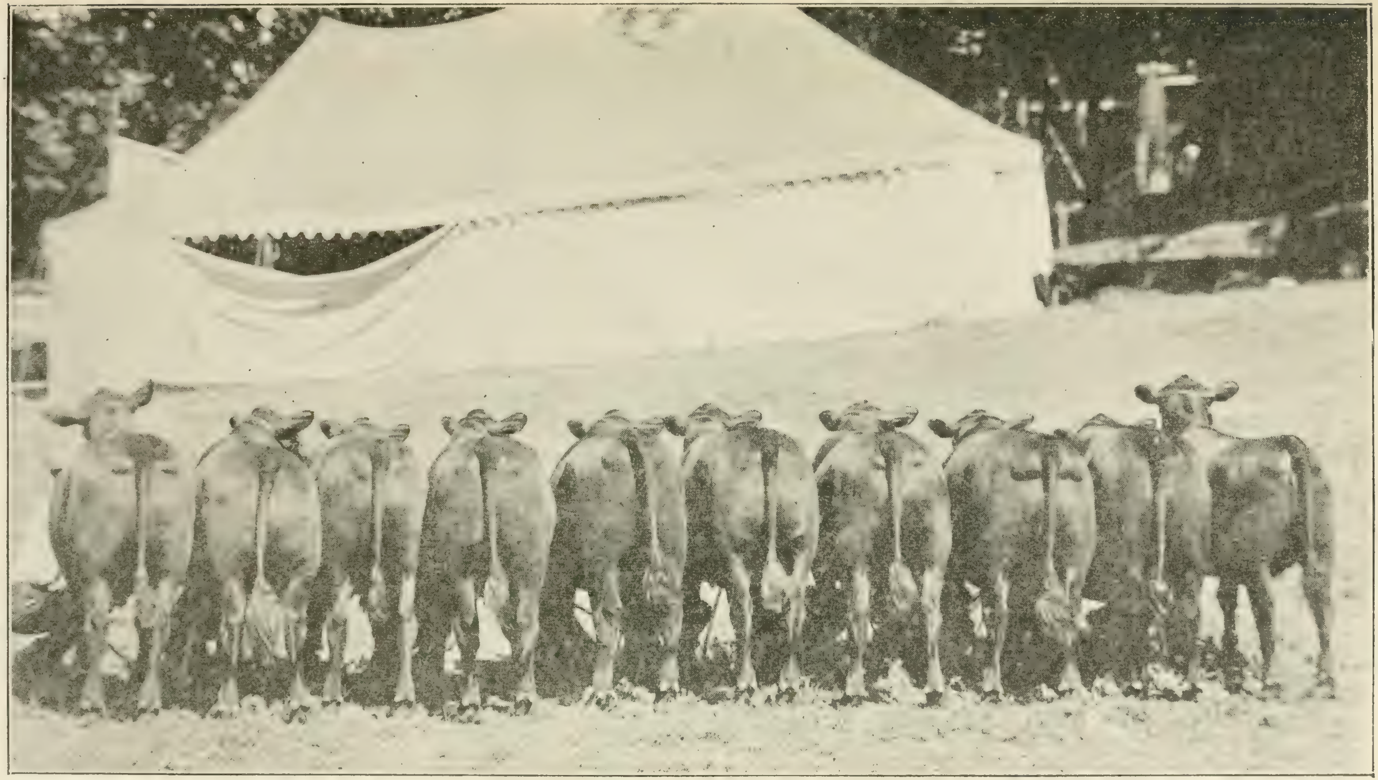
JUDGE..H. W. VAUGHAN

SHORTHORN.

Shorthorn Market Calf—First, Joseph Caputo on Roan Bob; second, Dorothy & Herman Lohman on Marshal's Choice; third, Harold Pace on Roan Bud; fourth, Dorothy & Herman Lohman; fifth, Orville Nelville on Red Lad; sixth, Ida Fricke on Silver Joe; seventh, Harry Haddock on Roan Bess; eighth. Leo Piper on Dale; ninth, John Holmquist on Ben; tenth, Cecil Waltemeyer on Stylish Lad; eleventh, Vaughn McDowell on Tom; twelfth, Dale G. Duncan on Bruno; thirteenth, Leland Halter on White Rex; fourteenth. Edward E. Ehrecke on Randolph; fifteenth, Albert Meisky on Shorty; sixteenth, Wilmer Farley on Morning Star; seventeenth, Virgil Haugen on Harry; eighteenth, Harry Braun on Bill; nineteenth, Archie Braun on Jimmy; twentieh, Lyman Dan Schmidt on Lyman's Pride; twenty-first, Eugene Martin on Major 2d; twenty-second, Forrest Shafer on Gaylord; twenty-third, Edward E. Ehrecke on Murray 896263; twenty-fourth, Jennie Turner on Mable.

Hereford Market Calf—First, Floyd Meyers on Beau Monkton 3rd; second, Morris Butler on Beaumon; third, Mary E. Verry on John Buckskin; fourth, Carl D. Davis on Tom; fifth, James Robinson on Marion Lad 2d; sixth, Virgin Sherwood on Nip; seventh, Robert Collins on Standard Lad; eighth, Arnold Thiessen on Garfield 816141; ninth, George Marion Smith on Donald's Perfection; tenth, Roy Bailey on Mike; eleventh, Wilbur Molison on Dynamite; twelfth, Mary E. Verry on Faith; thirteenth, Charles McTee on Gainmaker; fourteenth, Paul Maxwell on Royal Onward 27th 812655; fifteenth, Orville Neville on Prince; sixteenth, Earl F. Lamb on Rex; seventeenth, Earl F. Lamb on Gay; eighteenth, Esther C. Smith on Buffalo Bill; nineteenth, James Shepard on Teddy; twentieth, Paul Wittrig on Sor; twenty-first, Keith Kelley on Maggie; twenty-second, Keith Kelley on Jiggs; twenty-third, Harry Braun on Andy.

Aberdeen Angus Market Calf—First, Henry Haddock on Quaker Lad; second, Calvin Korns on Black Robin 2d; third, John Holmquist on Buster; fourth, Wilbur Molison on Spot; fifth, Harold Pace on Tom; sixth, Ernest Holmquist on Black Ben; seventh, John Holmquist on Justo Pride; eighth,



CHAMPION COUNTY EXHIBIT, IOWA BOYS' AND GIRLS' MARKET CALF FEEDING CONTEST, MARSHALL COUNTY.

Lester Plummer on Ensign; ninth, Nelson Korns on Eric; tenth, Virgil Sherwood on Tuck; eleventh, Wilbur Molison on Nig; twelfth, Willie Turner on Freddie; thirteenth, Roy Neiderhouser on Ted; fourteenth, Willard Houser on Duke; fifteenth, Orville Neville on Black Lad; sixteenth, W. Lester Metz on Jim; seventeenth, Nelson Korns on Black Joe II; eighteenth, E. A. Stewart on Bill; nineteenth, Frank Moninger on Justo Boy; twentieth, Fon K. Irwin on Nig; twenty-first, Arthur McTee; twenty-second, Wilmer Lauderman on Jumbo; twenty-third, Vernon Shepard on Shorty.

First and Second Winners in Shorthorn, Hereford and Aberdeen Angus Classes—First, Henry Haddock on Quaker Lad; second, Joseph Caputo on Roan Bob.

County Market Calf Club Exhibit of Ten Calves from Same County—First, Marshall County Baby Beef Club on ten Angus; second, Marshall County Baby Beef Club on seven Shorthorns and three Herefords; third, Poweshiek County on seven Angus, two Herefords and one Shorthorn; fourth, Muscatine County on four Angus, three Herefords, and three Shorthorns; fifth, Marshall County Baby Beef Club on ten Angus; sixth, Poweshiek County on three Angus, one Shorthorn and six Herefords; seventh, Muscatine County on six Shorthorns and four Herefords; eighth, Washington County Baby Beef Club on three Angus, four Herefords and three Shorthorns.

IOWA BOYS' AND GIRLS' PURE BRED HEIFER CLUB.

Exhibitors—Alice Atwood, Fairfield; Wilson Atwood, Fairfield; John Blake, Dallas Center; Ralph Berrie, Fairfield; Myrtle Berrie, Fairfield; Frank Buchanan, Ottumwa; Milton Coffin, Fairfield; Hervey Coffin, Veo; Willis Coffin, Veo; Roy Crawford, Stockport; Virgil Fox, Dallas Center; Lyle Fox, Dallas Center; Lester Gouterman, Batavia: Loy Harris, Batavia; Ralph Harris, Fairfield; Nelson Korns, Hartwick; Calvin Korns, Hartwick; Lee Leonard, Perry; Harold Leonard, Waukee; Ralph Leonard, Perry; Dwight Miller, Fairfield; H. D. McLain, Fairfield; Verle Simmons, Fairfield; Paul Rynor, Fairfield; Walter Steward, Fairfield; Russell Simmons, Fairfield; Clifford Simmons, Fairfield; Vivian Stucker, Fairfield; Hazel Whittaker, Fairfield; Derrell Whittaker, Fairfield; Wallace Webb, Fairfield.

SHORTHORN CLASS.

Senior Heifer Calf—First, Lysle Fox on Village Flora.

Yearling Heifer—First, Frank Buchanan on Daisy May 876630; second, Frank Buchanan on Lily Maid 876633; third, Jennie Turner on Silver Rose; fourth, Virgil Fox on Butterfly Maid.

Champion Heifer—Frank Buchanan on Daisy May 876630.

HEREFORD CLASS.

Senior Heifer Calf—First, Harold Leonard on Lou Bullion 882744.

Yearling Heifer—First, H. D. McLain on Martha Donald 856933; second, Russell Simmons on Salina 10th 856946; third, Clifford Simmons on Opal 802929; fourth, Willis Coffin on Silna's Miss 856949; fifth, Ralph Harris on Amy Donald 856925; sixth, Milton Coffin on Mamie Donald 856932.

Champion Heifer—H. D. McLain on Martha Donald 856933.

Group of Five Head Shown by one Club—First, Jefferson County Calf Club.

ABERDEEN ANGUS.

Senior Heifer Calf—First, John Blake on Blackbird Lassie of Walnut Creek.

Yearling Heifer—First, Nelson Korns on Walnut Dell Queenette 5th 303587; second, Calvin Korns on Walnut Dell Edna 10th 303585; third, Lee Leonard on Lassie Blackie 308672; fourth, Ralph Leonard on Quilla S No. 4, 308675.

Champion Heifer—Nelson Korns on Walnut Dell Queenette 5th 303587.

SWINE DEPARTMENT.

POLAND CHINA

SUPERINTENDENT......................CYRUS A. TOW, NORWAY, IOWA

EXHIBITORS—Anderson Bros., West Liberty; Lewis M. Andrews, Decatur; J. L. Armstrong, Zearing; Chas. E. Baker, Bondurant; Joseph. J. Bieber, Muscatine, R. F. D. No. 2; Dan R. Bates, Jr., Guthrie Center; R. A. Bell, Atlantic; Bell Bros. & Wood, Wiota; M. Breen & Son, Colfax; A. J. Banks, Montour; R. R. Blake, Dallas Center; John Blaner, Tingley; Calhoun Bros., Birmingham; C. W. Cress, Coon Rapids; Wm. Cottrill, Des Moines, R. F. D. 6; I. J. Conrad, Melbourne; W. E. Conrad, Melbourne; G. C. Cox, Oskaloosa; W. Preston Donald, Clio; Harry B. Duncan, Bagley; W. W. Davisson & Sons, Wellman; R. T. Donney, Indianola; Henry Dorr, Marcus; M. A. Dowling, Valley Junction; Homer Duea, Zearing; P. C. Elgin, Carlisle, R. F. D. 1; L. W. Fincham, Nevada; J. M. Ford, Milo; C. D. Freel, Runnells; S. L. Farlow, Ankeny; Hansel & Quarton, Rose Hill; E. B. Hoover, Oskaloosa; Roy C. Funk, Osage; Hargrove & Arnold, Norwalk; E. H. Hasley, Norway; Holmes Bros., West Liberty; H. H. Harris & Sons, Orient; Geo. T. Hagen, Norwalk; Jay Bros., St. Anthony; J. F. Hook, Oskaloosa; Earl Howard, Shenandoah; O. O. Howard, Marathon; Virgil Hurless, Storm Lake; A. and J. C. Johnson, Lynnville; Arthur Karr, Indianola; Garret P. Klein, Altoona; Peter Kleinpaste, Lacey; Wm. Lentz, Ankeny; Loveland Stock Farm, Mt. Pleasant; Herbert Meyer, Stacyville; Wilfred McClanahan, Mitchellville; Thos. McMahon & Son, Farragut; J. T. Malloy & Son, Albion; Mandeville & Edson, Storm Lake; O. R. Mark, Adel; Meyer Bros., Leshara, Neb.; Floyd G. Mitchell, Fairfield; Earl Menzel, McCallsburg; Ernest Melberg, Norway; Stanley Morgan & Sons, Kirkman; P. M. Nichols, West Liberty; Chas. E. Norman, Zearing; C. W. Overton, Knoxville; Isaac Overton, Knoxville; G. A. Perry, Knoxville; O. E. Perry, Gilman; D. H. Paul, Haverhill; Pfeifer & Long, Odebolt; Charles Pfander, Clarinda; I. M. Reed & Sons, Oskaloosa; W. L. Rierson, Nevada; Amasa Roberts, Bentonsport; Charles E. Reed, New Providence; T. G. Reis, Indianola; L. H. Schoenman, Blockton, Charles E. Smith, Menlo; Fred Sievers, Audubon; S. J. Steddom & Son, Granger; John Sansfield & Son, Atlantic; Marshall Souers, Ankeny; Austin Skinner, Kellerton; Mark I. Shaw, Monroe; Marion Spear, Wellman; I. W. Stephenson, Center Point; L. C. Stiles; Bayard; E. E. Stimmel, Oxford; Clifford Tague, Kirkman; A. J. Terall, Reinbeck; Lester I. Thompson, Ankeny; J. B. Tye & Son, Pleasanton; H. A. Tessman, Ross; Mack Utterback, Sigourney; C. B. Van Buskirk, Eldon; W. W. Watters, Iowa City; S. C. Wyckoff, Kellerton, Wengert Bros., State Center; Wolph Bros., Nehawka, Neb.; Ai Warren, Guthrie Center; W. L. Willey, Menlo.

JUDGE................................CHAS. A. MARKER, AUBURN, ILL.

Aged Boar—First, Ernest Melberg on Dunndale Pilot, 329667; second, Fred Sievers on Long King, 370659; third, Ai Warren on Propeller, 91567; fourth, Loveland Stock Farm on Big Boulder 282497; fifth, A. and J. C. Johnson on Big Joe's Equal, 357985; sixth, Harry B. Duncan on Guthrie King, 95398; seventh, E. H. Hasley on Long Marvel, 338043.

Senior Yearling Boar—First, S. C. Wyckoff, on Chief Improver, 350209; second, G. A. Perry on Perry's Big Jumbo, 405485; third, W. Preston Donald on Diamond Pilot, 400305; fourth, P. C. Elgin on Dowling's Prospect, 351671; fifth, W. Davisson & Sons on Orange Supreme, 352793; sixth, L. E. Stiles on Signal, 11313; seventh, Arthur Karr on Madel Price, 353491.

Junior Yearling Boar—First, Bell Bros. & Wood on Cicotte, 378035; second, C. W. Cress on Decide, 113135; third, W. Preston Donald on A Perfect Rainbow, 370867; fourth, John Sarsfield & Son on Perfection Yankee, 372019; fifth, C. W. Overton on Illuminator, 395864; sixth, Joe Kramer on Governor Timm, 399551; seventh, Meyer Bros. on Giant Liberator, 358177.

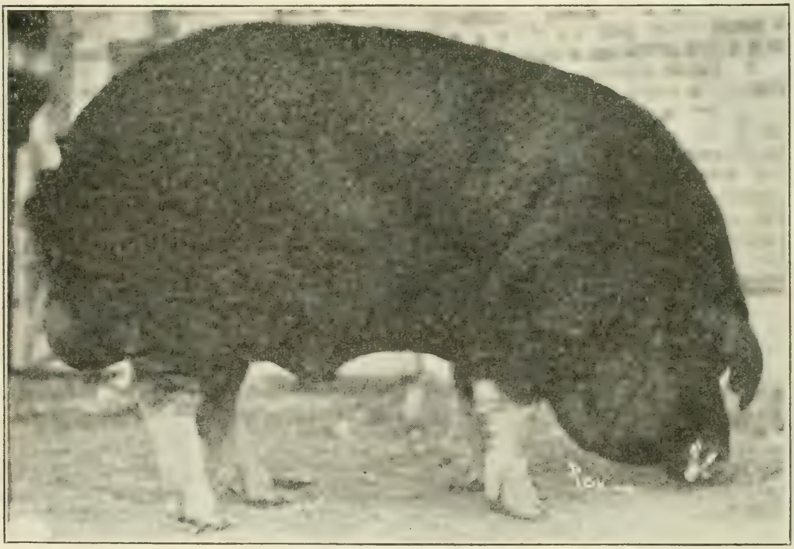
Senior Boar Pig—First, M. A. Dowling on The Wit, 393201; second, J. B. Tye & Sons; third, W. Preston Donald on Bearcat, 397379; fourth, Henry Dow on Big Model; fifth, Anderson Bros. on Monarch; sixth, Henry Dow on Evergreen Model I; seventh, Chas. E. Smith on The Deacon, 406303.

Junior Boar Pig—First, M. A. Dowling; second, I. J. Carrod; third, M. A. Dowling; fourth, Meyer Bros. on Western Honor; fifth, Ray O. Funk on Funk's Pilot; sixth, Roy C. Funk; seventh, Wm. Cottrill on The Iowan 407935.

Aged Sow—First, Bell Bros. & Wood on Medallion, 716198; second, Homer Duea on Patsy, 242892; third, Dan R. Bates, Jr., on Miss Promotor, 242294; fourth, D. H. Paul on Smooth Look, 718484; fifth, Chas. E. Baker on Giant's Queen, 863572; sixth, Chas. Reed on Orange Maid, 822070; seventh, S. J. Seddom & Sons on Orphan Lady, 871138.

Senior Yearling Sow—First, W. Preston Donald on Lady Clan II, 241339; second, W. Preston Donald on Lady Advancer II, 942590; third, J. M. Ford on Jone's Maid, 920848; fourth, D. H. Paul on Fancy Look 1st, 824924; fifth, Wolph Bros. on Our Lady Orphan, 255743; sixth, Dan R. Bates, Jr.; seventh, E. A. E. A. Drummy on Long Princess, 948936.

Junior Yearling Sow—First, I. J. Conrad on Giant Maid, 974246; second, I. J. Conrad on Hawkeye Girl, 823483; third, Wm. Cottrill on Miss Rainbow, 872156; fourth, Wm. Cottrill on Lady Rainbow, 872154; fifth, Wengert Bros. on Fashion Miss, 969528; sixth, Homer Duea on Jumbo Miss, 273311; seventh, D. H. Paul on Matchless H 3rd, 824932.



DUNNDALE PILOT.

Senior and Grand Champion Poland China Boar. Ernest Melberg, Norway, Ia.

Senior Sow Pig—First, Loveland Stock Farm on Orphan Maid; second, Anderson Bros. on Queen's Lady; third, Henry Dorr on Big Pencicola; fourth, Anderson Bros. on Orphan Girl; fifth, W. L. Willey on Colonel's Lady, 972350; sixth, Henry Dorr on Pencicola Over; seventh, Ernest Melberg on Orange Annie 935328.

Junior Sow Pig—First, M. A. Dowling; second, Meyer Bros. on Black Lil 2nd; third, G. C. Cox on Lady Buster; fourth, M. A. Dowling; fifth, I. J. Conrad;

sixth, W. Preston Donald on Orange Princess I; seventh, Anderson Bros. on Trader's Best.

Senior Champion Boar—Ernest Melberg on Dundale Pilot.

Junior Champion Boar—M. A. Dowling on The Hit.

Grand Champion Boar, Any Age—Ernest Melberg on Dundale Pilot.

Senior Champion Sow—W. Preston Donald on Lady Clan 2nd.

Junior Champion Sow—M. A. Dowling on Miss Rainbow, 969216.

Grand Champion Sow, Any Age—W. Preston Donald on Lady Clan 2nd.

Aged Herd, Owned by Exhibitor—First, W. Preston Donald; second, D. H. Paul; third, Amasa Roberts; fourth, Joe Kramer.

Aged Herd, Owned and Bred by Exhibitor—First, D. H. Paul; second, Joe Kramer.

Young Herd, Owned by Exhibitor—First, M. A. Dowling; second, M. A. Dowling; third, I. J. Conrad; fourth, Henry Dorr; fifth, Anderson Bros.; sixth, G. C. Cox; seventh, Chas. E. Baker.

Young Herd, Owned and Bred by Exhibitor—First, M. A. Dowling; second, M. A. Dowling; third, I. J. Conrad; fourth, Henry Dorr; fifth, Anderson Bros.; sixth, G. C. Cox.

Get of Sire—First, M. A. Dowling, sired by Rainbow; second, M. A. Dowling, sired by Rainbow; third, I. J. Conrad, sired by Orange Boy; fourth, Henry Dorr, sired by Evergreen Model; fifth, Anderson Bros., sired by Iowa Standard; sixth, Wm. Cottrill, sired by Rainbow; seventh, J. F. Hook, sired by Rainbow.

Produce of Dam—First, M. A. Dowling, dam Orange Queen; second, M. A. Dowling; dam May Orange; third, I. J. Conrad, dam Black Giantess; fourth, Anderson Bros., dam Quality Queen; fifth, Henry Dorr, dam Pencicola 2nd; sixth, Wm. Cottrill, dam Belle Prospect; seventh, J. F. Hook, dam Laura Prince 2nd.

POLAND CHINA FUTURITY

Junior Yearling Boar—Joe Kramer on Kramer's Timm, 353927.

Junior Yearling Sow—First, I. J. Conrad; second, Joe Kramer, third, Joe Kramer.

Senior Boar Pig—First, M. A. Dowling on The Hit, 393201; second, W. Preston Donald on Bear Cat, 397379; third, Henry Dorr on Big Model, 409381; fourth, Anderson Bros. on Monarch, 409401; fifth, Henry Dorr on Evergreen Model 1st, 409387; sixth, Anderson Bros., on Giant Master, 409397.

Senior Sow Pig—First, Anderson Bros. on Queen's Lady, 977872; second, Henry Dorr on Big Pensicola, 977836; third, Anderson Bros. on Empress, 977860; fourth, W. L. Willey on Colonel's Lady, 972350; fifth, Henry Dorr on Miss Model, 977846; sixth, S. L. Farlow on Long Lady First, 976358.

Junior Boar Pig—First, M. A. Dowling on The Pathfinder, 406701; second, I. J. Conrad on The Whip, 407521; third, M. A. Dowling on Bob's Rainbow, 406695; fourth, I. J. Conrad on Giant Boy, 407517; fifth, W. Preston Donald on Orange Prince, 411857; sixth, I. J. Conrad on Comet, 406141; seventh, I. J. Conrad on Dale's Model, 406143; eighth, Joe Kramer on Orange Master, 407983.

Junior Sow Pig—First, M. A. Dowling on Miss Rainbow, 969216; second, G. C. Cox on Lady Buster, 957306; third, M. A. Dowling on Rainbow Lady, 969224; fourth, I. J. Conrad on Miss Orange, 971984; fifth, W. Preston Donald on Orange Princess 1st, 985554; sixth, Anderson Bros. on Trader's Best, 977874; seventh, W. Preston Donald, on Orange Princess 2nd, 985556; eighth, I. J. Conrad on Miss Orange 2nd, 971986.

Litter of Four, Junior Pigs—First, M. A. Dowling on Orange May, 822856; second, M. A. Dowling on Orange Blossom, 59202; third, I. J. Conrad on Black Giantess, 641110; fourth, W. Preston Donald on Orange Princess, 942588; fifth, Henry Dorr on Dorr's Choice, 639618; sixth, G. C. Cox on Lady

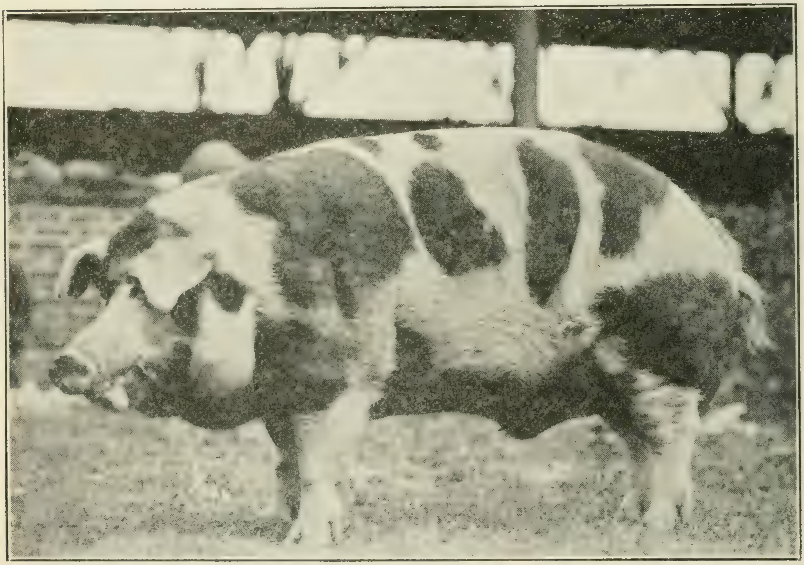
Queen, 697492; seventh, D. H. Paul on Mark Maid, 975078; eighth, John Sarsfield & Son on Prospect's Best, 750546.

SPOTTED POLAND CHINA

EXHIBITORS—Benn & Marner, Kalora; W. H. Crozier & Sons, Oskaloosa; Crozier & Piersel, Oskaloosa; R. N. Davisson, Wellman; Oscar Dahlgren, Eldon; R. L. Erb, Wellman; Fry & Shaver, Iowa City; Harris Bros., Blackwater, Mo.; Jones & Martens, Menlo; Lames & Calhoun, Plano; J. C. McClune, Oskaloosa; Frank A. Miller & Son, Carlisle, R. F. D. No. 3; Oldfield Bros., Wellman; Taylor, Taylor & McCracken, What Cheer; Taylor & Taylor, What Cheer; F. S. Taylor, What Cheer.

JUDGE....................................H. H. KILDEE, AMES

Aged Boar—First, Fry, Shaver and Hansel on Big Buckeye, 12975; second. Oscar Dahlgren on Big Gano, 10163; third, Taylor & Taylor on Y's Royal Prince III, 10573.



BIG BUCKEYE.

Grand Champion Spotted Poland China Boar. Fry & Shaver, Iowa City, Iowa.

Senior Yearling Boar—First. Taylor & Taylor on Taylor's Choice, 15923; second, Oldfield Bros. on Booster's Best, 28383.

Junior Yearling Boar—First, R. W. Davisson on English Pilot, 21269; second, Taylor and Taylor on Buster's Spotted King, 16529; third, Taylor and Taylor on Spotted Prince, 16533; fourth, Fry & Shaver on Duke of England Again, 28099; fifth, Shaver & Fry on Real Type, 22505; sixth, Oldfield Bros. on Prairie Pilot, 27899; seventh, J. C. McClune on All Booster I, 19845.

Senior Boar Pig—First, Fry & Shaver on Real Booster, 32155; second, Shaver & Fry on S. & F. Englishman, 33097; third, Taylor & Taylor on Taylor's Spotted Eagle, 29631; fourth, R. L. Erb on Lottie's Pride, 26791; fifth, Hansel & Quarton on English Giant Superior, 34149; sixth, Benn & Marner on Money Maker, 26478; seventh, Oscar Dahlgren on Gano's Pride II, 31641.

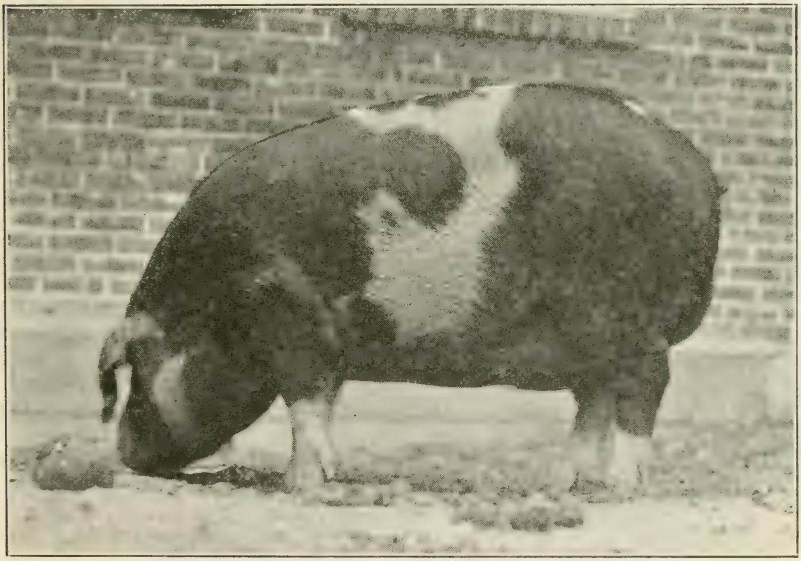
Junior Boar Pig—First, W. H. Crozier & Son; second, Taylor & Taylor; third, J. C. McClune on Archer I; fourth, R. W. Davisson; fifth, R. W. Davisson; sixth, Oscar Dahlgren; seventh, J. C. McClune on Big Joe.

Aged Sow—First, J. C. McClune on Rose H 3rd, 15852; second, Taylor & Taylor on Arb Lineal Giantess, 46216; third, Fry & Shaver on O'Bena 31st, 15738; fourth, Taylor & Taylor on Miss Bishop, 19108; fifth, J. C. McClune on Clip, 49548.

Senior Yearling Sow—First, Taylor & Taylor on Spotted May II, 50378; second, Fry & Shaver on Queen Ann, 49294; third, Taylor & Taylor on Spotted Else May, 80274; fourth, Fry & Shaver on Iowa Maid, 43292; fifth, J. C. McClune on R. Duchess 7th, 46378.

Junior Yearling Sow—First, Fry & Shaver on English Queen 13th, 56508; second, J. C. McClune on Rose M. 1st, 49544.

Senior Sow Pig—First, F. S. Taylor on Princess Queen I, 84392; second, Shaver & Fry on English Maid 1st, 90984; third, W. H. Crozier & Sons on Rose I, 81090; fourth, Hansel & Quarton on Buckeye Lady I, 74706; fifth, Fry & Shaver on Duke's Giantess, 77488; sixth, Taylor & Taylor on Taylor's English Belle, 79630; seventh, Oscar Dahlgren on Dahlgren's Pride I, 87492.



SPOTTED MAY 2D.

Senior and Grand Champion Spotted Poland China Sow. Taylor & Taylor, What Cheer, Iowa.

Junior Sow Pig—First, Taylor, Taylor & McCracken; second, Fry & Shaver on English Miss; third, Fry & Shaver on English Miss I; fourth, Oscar Dahlgren; fifth, R. W. Davisson; sixth, R. W. Davisson; seventh, Oscar Dahlgren.

Senior Champion Boar—Fry, Shaver and Hansel.

Junior Champion Boar—Fry & Shaver on Real Booster.

Grand Champion Boar, Any Age—Fry, Shaver & Hansel on Big Buckeye.

Senior Champion Sow—Taylor & Taylor on Spotted May 2nd.

Junior Champion Sow—F. S. Taylor on Miss Queen 1st.

Grand Champion Sow, Any Age—Taylor & Taylor on Spotted May 2nd, 50375.

Aged Herd, Owned by Exhibitor—First, Fry & Shaver; second, Taylor & Taylor; third, J. C. McClune; fourth, F. S. Taylor.

Aged Herd, Owned and Bred by Exhibitor—F. S. Taylor.

Young Herd, Owned by Exhibitor—First, Fry & Shaver; second, Taylor, Taylor & McCracken; third, Oscar Dahlgren; fourth, W. H. Crozier & Sons; fifth, Shaver & Fry; sixth, R. W. Davisson; seventh, Taylor & Taylor.

Young Herd, Owned and Bred by Exhibitor—First, Taylor, Taylor & McCracken; second, Oscar Dahlgren; third, Shaver & Fry; fourth, R. W. Davisson; fifth, Shaver & Fry.

Get of Sire—First, Fry & Shaver; second, Taylor, Taylor & McCracken; third, Oscar Dahlgren; fourth, Shaver & Fry; fifth, F. S. Taylor; sixth, R. W. Davisson; seventh, R. W. Davisson.

Produce of Dam—First, Taylor, Taylor and McCracken; second, Oscar Dahlgren; third, Shaver & Fry; fourth, F. S. Taylor; fifth, R. W. Davisson; sixth, R. W. Davisson; seventh, E. E. Stimmel.

FIRST PRIZE YOUNG HERD SPOTTED POLAND CHINAS.
Taylor, Taylor & McCracken, What Cheer, Iowa.

DUROC JERSEYS

Exhibitors—Adams & Swain, Algona; Ahrens Bros., Columbus, Neb.; T. E. Abbott, Menlo; C. E. Alsin, Boone; A. P. Alsin, Boone; Appenzeller Bros., Bouton; Fred Bonnesen, Kimballton; James M. Brockway, Letts; Board of Control, State Institutions; J. E. Burdick, Farragut; F. B. Butterfield, Ankeny; Frank Ballard, North English; J. W. Cartwright, Burlington; Chas. S. Crawford, Indianola; T. B. Chinnock, DeWitt, Neb., J. C. Corkery, Fairbank; M. C. Cramer & Son, Monroe; J. C. Danner, Yale; Wilbur Dean, Ocheyedan; Roy Demory, Indianola; J. G. Donohoe, Holbrook; Drummy Bros., Ryan; E. A. Drummy, Ryan; Deevey Bros., Janesville; M. J. Dooly, Fonda; Ward Eastburn, Sigourney; Ehlers & Bocken, Minden; John Fennema, Monroe; A. C. Flaugh & Son, Newton; C. W. Graham, Jr., Grimes; E. J. Hawker, West Liberty; Emmet C. Hanshaw, Douds; W. J. Hanson, Holbrook; H. H. Harper, Ames; Jas. L. Harper & Son, Ames; F. E. Humphrey, North English; J. J.

Horr, Mechanicsville; J. G. Holmes & Sons, Monticello; W. A. Hooper, Runnells; Bert Holmes, Muscatine; Curt Herring & Son, Mechanicsville; Albert Hyzer, Storm Lake; H. M. Iltis, Des Moines; F. A. Johnson & Son, Stratford; J. P. Jorgensen, Elk Horn; C. B. Jarnagin, Monroe; Fred Knop, Charter Oak; S. C. Kellogg, Legrand; W. A. Kellogg, Legrand; Geo. H. Koch, Brighton; John Krebs, Riverside; F. T. Lengeman, Coon Rapids; Wm. J. Lockhart, Des Moines, R. F. D.; Lowman Bros., Graettinger; J. F. Lockridge, North English; W. W. Lockridge, North English; G. M. Longhenry, Stratford; Grant Lynn & Son, Spirit Lake; C. S. McCormick & Son, Oskaloosa; McKee Bros., Creston; McClelland Bros., Bondurant; H. A. McCaffee, Janesville; R. P. Maguire & Son, Wisner, Neb.; Arthur E. Mallory, Hampton; Jos. H. Mauer, Stacyville; Wayne W. Markwell North English; A. S. & G. W. Mundorf, Griswold; C. J. Mangels, Fontanelle; Miner Bros., Clear Lake; Mueller Bros., Cumberland; E. W. Neujahr, Ulysses, Neb.; C. L. Overbaugh, Mechanicsville; G. R. Peters, DeWitt; Proctor Bros., Orient; E. W. Peck, Greenfield; Dr. Geo. B. Patterson, Minden; E. L. Perry, St. Anthony; Artie Pence, Sigourney; Pieper Bros., Minden; W. H. Pruter, West Side; R. B. Reynolds, Guthrie Center; Ray Roush, Douds; H. M. Raub, Muscatine; Bert Rexroat, Pleasantville; S. E. Robinson, Yale; Thos. Robinson, Independence; John Roskamp, Grundy Center; Ross & Son, Casey; Walter Russell, Indianola; H. E. Satre, Stanhope; G. O. Satre, Stanhope; John A. Satterlee & Sons, Independence; Sawhill & Son, Clarinda; Milo J. Shalla, Wellman; Fred A. Shaw, Monroe; M. Spencer, Audubon; Swen Swenson, Kanawha; R. M. Steen, New Sharon; P. P. Standgaard, Berwick; F. A. Strong, Orient; Ben G. Studer, Wesley; W. B. Shaw, Monroe; Raymond Shaw, Monroe; Walter Sargent, Mitchellville; I. J. Swain & Sons, Malvern; Sunset Farm, 2948 Easton Blvd., Des Moines; J. C. Tallman, Montieth; E. A. Thompson, Storm Lake; M. T. Twedt & Son, Legrand J. A. Vipond & Sons, Algona; G. A. Woods, Mechanicsville; Grant White, Afton; C. F. Waldo, DeWitt, Neb.; H. O. Waldo, DeWitt, Neb., J. F. Waltemeyer & Son, Melbourne; Williams Bros., Redfield; Edwin H. Witter, Storm Lake; Everett Wilson, Pella; R. J. Worthington, Cumberland; A. H. Wright, Newton; C. A. Zellmer, Atlantic.

JUDGE..H. H. KILDEE, Ames

Aged Boar—First, G. O. Satre on Great Wonder I Am, 276489; second, Albert Hyzer on Rainbow Colonel; third, M. C. Cramer & Son on Great Orions Giant, 274643; fourth, Mueller Bros. on Orion Sensation, 268981; fifth, E. A. Thompson on King's High Orion, 320751; sixth, A. P. Alsin on Model Wonder, 265547; seventh, A. E. Mallory on Cal Trailfinder, 235431.

Senior Yearling Boar—First, H. E. Satre on Big Wonder I Am, 305519; second, J. D. Waltemeyer & Son on Master Piece, 361845; third, R. P. McGuire & Son on Uneeda Great Sensation, 313247; fourth, J. G. Anderson on Great Wonder Supreme, 305521; fifth, Fred Knapp on Giant Model Jr., 309299; sixth, Fred Knapp on Iowa Cherry King Jr., 317163; seventh, J. A. McCaffee on L. C. Own Wonder, 332661.

Junior Yearling Boar—First, Ben G. Studer on Uneeda Orion Sensation; second, Thomas Robinson on Pathfinder's Superior, 356853; third, Vipond & Son on Wonder Giant I Am, 338581; fourth, C. L. Overbaugh on Valley Cal's Pathfinder, 356839; fifth, R. P. McQuire & Son on Double Sensation, 338457; sixth, M. Spencer on King Sensation, 309161; seventh, G. R. Peters on Great Orion Sensation, 349683.

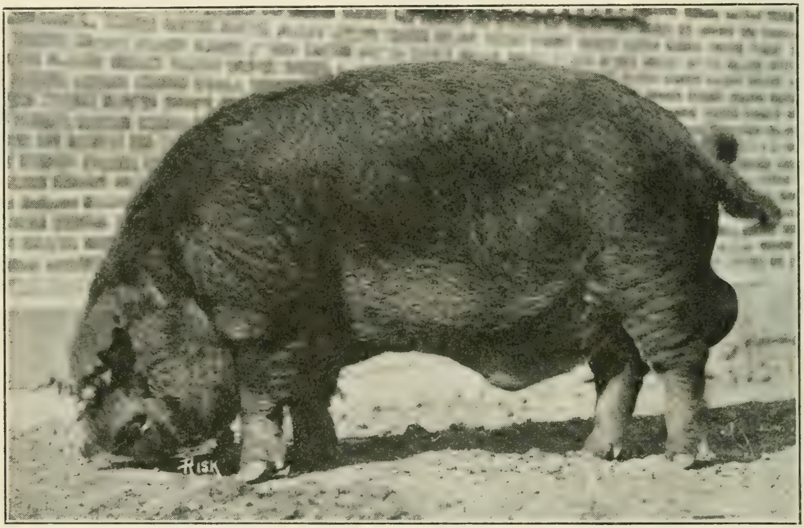
Senior Boar Pig—First, J. D. Waltmeyer & Son on Ring Master, 360447; second, R. P. McGuire & Son; third, James L. Harper & Son on Cal Orion Sensation, 361715; fourth, I. J. Swain & Sons on Cherry King's Sensation Orion, 362435; fifth, R. M. Steen on Big Orion Sensation, 361111; sixth, McKee Bros. on Pathfinders Rival, 357419; seventh, Milo J. Shalla on Paymaster, 361125.

Junior Boar Pig—First, J. D. Waltmeyer & Sons on King of the Giants, 361520; second, Milo J. Shalla on Pathfinder Jack, 359619; third, R. C. McGuire & Son on Great Uneeda Sensation, 359081; fourth, J. D. Waltmeyer & Son on King of the Giants 1st, 361531; fifth, C. S. McCormick on Jumbo Orion, 362845; sixth, F. T. Lengeman on Pathfinder's Col. 12th, 181465; seventh, J. P. Jorgensen on Pathfinder's Sensation 13th.

Aged Sow—First, Mueller Bros. on Orions Big Lady, 808700; second, I. J. Swain & Sons on Lizzie's Sensation, 806420; third, Mueller Bros. on Pathfinder's Duchess, 772144; fourth, James M. Brockway on Model Cherry Queen, 796730; fifth, J. C. Corkery on Model Bell, 663284; sixth, R. F. Smylie on Pathfinder Princess; seventh, R. F. Smylie on Torny Doyles Girl, 845208.

Senior Yearling Sow—First, R. P. McGuire & Son on Sensation's Beauty, 847028; second, J. P. Jorgensen on Pathfinders' Model, 948586; third, O. S. & G. W. Mundorf on Lady Orion 2nd, 876916; fourth, Albert Hyzer; fifth, J. P. Jorgensen on Big Lady Wonder, 856578; sixth, R. P. McGuire & Son; seventh, C. A. Zellemer on Disturber's Queen 1st.

Junior Yearling Sow—First, R. P. McGuire & Son on Great Sensation Girl 3rd, 873030; second, R. P. McGuire & Son on Great Sensation Girl 2nd, 873028; third, J. A. Waltemeyer & Son on Wonder Maid 12th, 938360; fourth, J. D. Waltemeyer & Son on Wonder Blossom 5th, 938368; fifth, James M. Brockway on Victory Repeater Maid II, 845218; sixth, R. B. Reynolds; seventh, J. P. Jorgensen on Pathfinder's Lassie, 791506.



BIG WONDER I AM.
Senior and Grand Champion Duroc Jersey Boar. G. O. Satre, Stanhope, Iowa.

Senior Sow Pig—First, R. P. McGuire & Son; second, R. P. McGuire & Son; third, Jas. L. Harper & Son on Sensationette, 941512; fourth, J. D. Waltemeyer & Son on Miss Wonder 1st, 938362; fifth, I. J. Swain & Sons on Queen of Orion Sensation, 943930; sixth, E. A. Thompson on Miss Col Gano 6th, 944408; seventh, O. S. & G. W. Mundorf on Pathfinder's Col Lady 3rd, 934900.

Junior Sow Pig—First, J. D. Waltmeyer & Son on Grant's Queen 1st, 941640; second, R. P. McGuire & Son on Uneeda's Beauty, 934700; third, C. S. McCormick & Son on Queen of Sensation, 944152; fourth, Milo J. Shalla on Pathfinder Queen, 935938; fifth, J. D. Waltmeyer & Son on Grant's Queen, 941638; sixth, J. M. Brockway on Pathfinder Victory Ganos 1; seventh, J. G. Donohoe.

Senior Champion Boar—First, G. O. Satre.

Grand Champion Boar, Any Age—G. O. Satre.

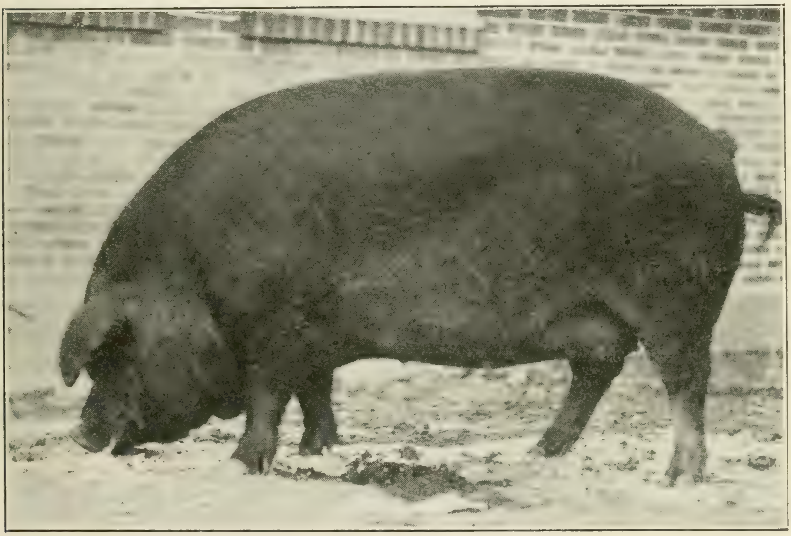
Aged Herd Owned by Exhibitor—First, R. P. McGuire & Son; second, J. D. Waltmeyer & Son; third, Mueller Bros.; fourth, J. P. Jorgensen; fifth, A. P. Alsin; sixth, J. W. Cartwright; seventh, O. S. & G. W. Mundorf.

Aged Herd Owned and Bred by Exhibitor—First, J. D. Waltemeyer & Son; second; J. P. Jorgensen; third, J. W. Cartwright; fourth, O. S. & G. W. Mundorf; fifth, R. B. Reynolds.

Young Herd Owned by Exhibitor—First, R. P. McGuire & Son; second, J. D. Waltemeyer & Son; third, J. D. Waltemeyer & Son; fourth, Milo J. Shalla; fifth, I. J. Swain & Sons; sixth, Wilber Dean; seventh, Edwin H. Witter.

Young Herd Owned and Bred by Exhibitor—First, J. D. Waltemeyer & Son; second, J. D. Waltemeyer & Son; third, I. J. Swain & Son; fourth, E. A. Thompson; fifth, J. P. Jorgensen; sixth, J. M. Brockway; seventh, H. O. Waldo.

Get of Sire—First, R. P. McGuire & Son; second, Vipond & Son; third, J. D. Waltemeyer & Son; fourth, J. D. Waltemeyer & Son; fifth, R. P. McGuire & Son; sixth, I. J. Swain & Sons; seventh, Milo J. Shalla.



SENSATION'S BEAUTY.

Grand Champion Duroc Jersey Sow. J. P. Jorgenson, Elk Horn, Iowa.

Produce of Dam—First, R. P. McGuire & Son; second, J. D. Waltemeyer & Son; third, Milo J. Shalla; fourth, J. M. Brockway; fifth, I. J. Swain & Sons; sixth, Frank Ballard; seventh, C. F. Waldo.

DUROC JERSEY FUTURITY

Fall Boars—First, J. D. Waltemeyer & Son; second, Swain & Son; third, McKee Bros.; fourth, E. H. Witter; fifth, T. E. Abbott; sixth, J. P. Jorgensen; seventh, O. S. & G. W. Mundorf; eighth, C. A. Thompson.

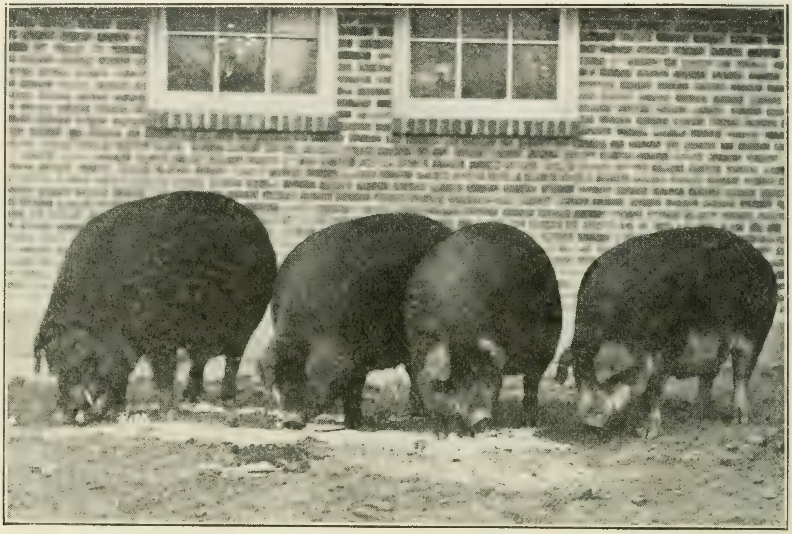
Fall Sows—J. L. Harper & Son; second, J. D. Waltemeyer & Son; third, Swain & Sons; fourth, E. A. Thompson; fifth, O. S. & G. W. Mundorf; sixth, Swain & Sons; seventh, E. H. Witter; eighth, M. Spencer.

Fall Pigs, Litter of Four—First, J. D. Waltemeyer & Son; second, Swain & Sons; third, J. M. Brockway; fourth, Edwin H. Witter; fifth, E. A. Thompson; sixth, J. P. Jorgensen; seventh, Mundorf Bros.; eighth, F. T. Lengeman.

Spring Boar—First, J. D. Waltemeyer & Son; second, M. J. Shalla; third, J. D. Waltemeyer & Son; fourth, F. T. Lengeman; fifth, J. P. Jorgensen; sixth, Swain & Sons; seventh, J. D. Waltemeyer & Son; eighth, W. A. Kellogg.

Spring Sow—First, J. D. Waltemeyer & Son; second, M. J. Shalla; third, J. D. Waltemeyer & Son; fourth, E. P. Shellabarger; fifth, J. P. Jorgensen; sixth, H. A. McCaffee; seventh, M. J. Shellabarger; Eighth, E. P. Shellabarger.

Spring Pigs, Litter of Four—First, J. D. Waltemeyer & Son; second, Milo J. Shalla; third, J. D. Waltemeyer & Son; fourth, E. P. Shellabarger; fifth, F. T. Lengeman; sixth, W. A. Kellogg; seventh, H. A. McCaffee; eighth, Artie Pence.



First Prize Aged Duroc Jersey Herd. R. P. McGuire & Son, Wisner, Neb.

SPECIAL PRIZES OFFERED BY THE AMERICAN DUROC JERSEY SWINE BREEDERS' ASSOCIATION.

Five Sows Farrowed Between Sept. 1, 1918, and March 1, 1920—First, J. W. Cartwright.

Best Senior Pig Herd—Boar and Three Sows—First, F. T. Lengeman; second, J. W. Cartwright.

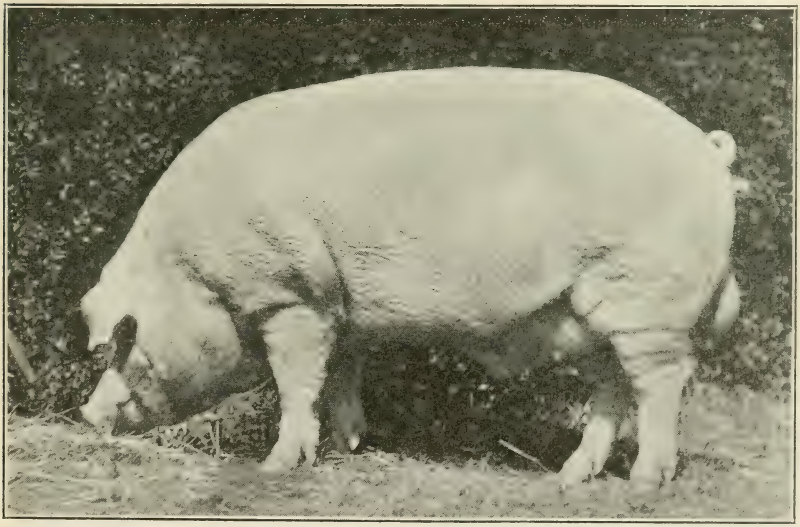
CHESTE WHITE.

Exhibitors—A. G. Anderson, Selma, Rt. No. 2; Alden Anderson, Story City; Buren R. Anderson, Storm Lake; A. P. Bans, Springfield, Minn.; T. A. Butler, Indianola; J. L. Barber, Harlan; R. P. Brom, Storm Lake; Homer Carmichael, Webster; Eli Crom, Pierson; B. M. Boyer & Sons, Farmington; E. W. Broderson, Newton, R. F. D. 4; John Branchle, Fort Dodge; G. R. Bishop, Runnells; H. L. Crosby, Webster City; Byron T. Calkins, Webster City; C. E. Correll, Adair; Craft & Cameron, Zearing; Allie Capps, Menlo; W. V. Dove & Sons, Janesville; W. H. Dunbar, Jefferson; Ed F. Evans & Sons, Webster City; R. F Heminger, Altoona; Harry Hall & Sons, Corning; A. W. Hanks, Menlo; John M. Gehring, Marengo; Wm. Green, Morgan, Minn.; C. H. Harding, Grimes; H. T. D. Henderson, Keota; M. P. Herbert, Atlantic, R. F. D. No. 3; Fred Himebaugh, Estherville; Grover Headlee, Guthrie Center; James K. Helmick & Son, Columbus Junction; W. E. Gaffey, Storm Lake; Arl Jeffers, Murray; E. F. Johnson, Guernsey; M. E. Kinney, Plymouth; J. H. & J. A. Lathrop, Oxford Junction; O. N. Lowery, West Grove; E. H. Kahl, Lakota; L. L. Lyle, Webster

City; Geo. A. Lasley, Selma; J. H. Lachmiller, Webster City; W. A. McMahon, West Liberty; Will Michael, Selma; Arthur Mosse & Daughter, Leavenworth, Kan.; J. H. and Duke Mahannah, North English; E. L. Nagle & Son, Deep River; Nordman & Grandon, Janesville; Elzy A. Porter, Guthrie Center; C. A. Parkis, Menlo; John Perry, Selma; C. S. Rock, West Liberty, R. F. D. 3; R. H. Rockafellow, West Liberty; C. C. Raner, Guthrie Center; Arthur W. Runft, Reinbeck; D. H. Schleichler & Son, Riverside; Arthur Spear, Wellman; Merle M. Sanborn, Menlo; Hans P. Smith, Alta; John J. Tracy, Greenfield; Bruce R. Vale, Bonaparte; V. L. Vanness, Newton; R. E. Williams, Iowa City; Ledru C. Willits, Mt. Pleasant; Leonard Willey, Menlo; M. W. Young, Ankeny.

JUDGE................................CHAS. A. MARKER, Auburn, Ill.

Aged Boar—First, John J. Tracy on Harvey's Stamp, 55933; second, J. L. Barber on King Chester, 58483; third, Homer Carmichael on Prince of All, 65459; fourth, Bruce R. Vale on Rajah Wildwood, 19019; fifth, C. C. Raner on Rajah Jr., 53201; sixth, H. T. D. Henderson on Vaillima, 19649; seventh, B. M. Boyer & Sons on Maplewood Prince, 73999.



PRINCE DEFENDER B.

Senior and Grand Champion Chester White Boar. L. L. Lyle, Webster City, Iowa.

Senior Yearling Boar—First, M. P. Herbert on Aviator, 75733; second, Chas. F. Brown on King Anak, 68539; third, Buren R. Anderson on Bonnie Crest, 74241; fourth, A. P. Rans on Billy 2nd, 65213; fifth, Arthur W. Runft on Runft's Big Chief, 80617; sixth, J. H. & Duke Mahannah on Eklyz Wildwood, 69081; seventh, Arthur Mosse & Daughter on Best Yet, 69933.

Junior Yearling Boar—First, L. L. Lyle on Prince Defender, 69639; second, Chas. F. Brady on Prince Rajah A, 69661; third, R. E. Williams on Smooth Prince, 67781; fourth, Fred Himebaugh on Warrior, 79437; fifth, Alden Anderson on Big Challenger, 87465; sixth, Chas. F. Brown on Chief Prospector, 68895; seventh, Jas. K. Helmick & Son on Big Prince, 71463.

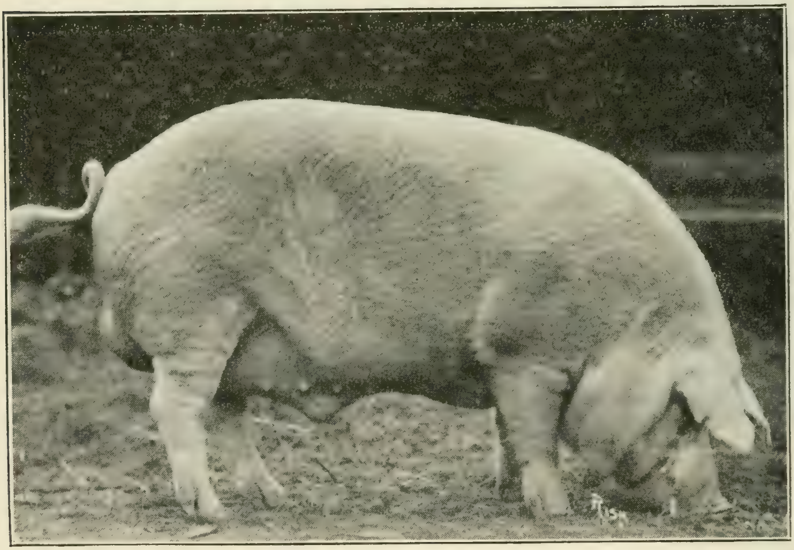
Senior Boar Pig—First, Ledru C. Willits on O. K. Boy, 88329; second, J. H. & Duke Mahannah on O. K.'s Great Iowan, 88807; third, E. L. Nagle & Son on Wayup, 86615; fourth, A. P. Rans on King 1st, 87653; fifth, Ledru C. Willits on High Big Bone, 88331; sixth, J. L. Barber on Northern Spy, 90411; seventh, W. A. McMahon on Junior Big Bone, 89329.

Junior Boar Pig—First, J. L. Barber on Chief Justice 2nd, 90807; second, J. L. Barber on City Major, 89911; third, E. L. Nagle & Son on Captain, 88897; fourth, M. E. Kinney on Mountain, 88507; fifth, William Herbert; sixth, E. L. Nagle & Son on Joe, 88899; seventh, J. H. Lachmiller on Prince Anah, 87999.

Aged Sow—First, B. M. Boyer & Sons on Schan's Big Bob 2nd, 120438; second, Jas. K. Helmick & Son on Wildwood Princess, 148530; third, Arthur Mosse & Daughter on Dona Charlotte Idalia, 138022; fourth Ledru C. Willits on Orphelia, 97970; fifth, J. H. Lachmiller on Sunshine I, 157848; sixth, Jas. K. Helmick & Son on Edith M., 121580; seventh, John Branchle on Soldiercreek Surprise, 153162.

Senior Yearling Sow—First, Chas. F. Brown on Alfalfa Lady, 177888; second, B. M. Boyer & Sons on Plymouth Princess L., 2nd, 198130; third, M. E. Kinney on Giant Bell, 197552; fourth, Jas. K. Helmick & Son on Princess Louise, 157296; fifth, Arthur Mosse & Daughter on Dora Dorothea Wildwood, 155948; sixth, M. P. Herbert on Long Lady 3rd, 163454; seventh, Arthur Spear on Josephine, 156508.

Junior Yearling Sow—First, Bruce R. Vale on Mona X, 34838; second, Bruce R. Vale on Mona Y, 34836; third, C. S. Rock on Oakpark Mable, 172278; fourth, P. J. Bram on Snowflake 22nd, 195676; fifth, J. H. & Duke Mahannah on O. K's Wildwood Princess, 207024; sixth, J. H. Lachmiller on Miss Wildwood, 204642; seventh, Arthur Mosse & Daughter on Dona Williams Princess 5th, 177932.



AVIATOR.

First Senior Yearling Chester White Boar. M. P. Herbert, Atlantic, Iowa.

Senior Sow Pig—First, B. M. Boyer & Sons on Prince's Giantess, 206192; second, Arthur Mosse & Daughter on Dona Bolshevik, 205112; third, E. L. Nagle & Son on Lilly, 34766; fourth, W. A. McMahon on Miss Perfection, 208036; fifth, Bruce R. Vale on Rose, 34638; sixth, Ledru C. Willits on Ruth Law 2nd, 206230; seventh, J. L. Barber on Royal Beauty's Model, 209834.

Junior Sow Pig—First, Ledru C. Willits on High Miss, 206218; second, J. L. Barber on Miss Justice, 208978; third, Arthur Mosse & Daughter; fourth, B. M.

Boyer & Sons on Col's Princess 2nd, 206182; fifth, R. H. Rockafellow; sixth, E. L. Nagle & Son on Ruby, 207206; seventh, R. E. Williams on Princess.

Senior Champion Boar—L. L. Lyle on Prince Defender B, 69639.

Junior Champion Boar—Ledru C. Willits on Hawkeye Giant.

Grand Champion Boar, Any Age—L. L. Lyle on Prince Defender B, 69639.

Senior Champion Sow—B. M. Boyer & Son on Schan's Big Bob 2nd.

Junior Champion Sow—Ledru Willits on High Miss.

Grand Champion Sow, Any Age—B. M. Boyer & Son on Schan's Big Bob 2nd.

Aged Herd Owned by Exhibitor—First, B. M. Boyer & Sons; second, J. L. Barber; third, Arthur Mosse & Daughter; fourth, J. H. & Duke Mahannah; fifth, Bruce R. Vale; sixth, E. L. Nagle & Son; seventh, Jas. K. Helmick & Son.

Aged Herd Owned and Bred by Exhibitor—First, B. M. Boyer & Sons; second, J. H. & Duke Mahannah; third, Bruce R. Vale; fourth, Arthur Mosse & Daughter; fifth, Jas. K. Helmick & Son; sixth, Bruce R. Vale.

Young Herd Owned by Exhibitor—First, Ledru C. Willits; second, J. L. Barber; third, J. L. Barber; fourth, B. M. Boyer & Son; fifth, E. L. Nagle & Son; sixth, Alden Anderson; seventh, Ledru C. Willits.

Young Herd Owned and Bred by Exhibitor—First, J. L. Barber; second, J. L. Barber; third, B. M. Boyer & Sons; fourth, E. L. Nagle & Sons; fifth, W. A. McMahon; sixth, Ledru C. Willits; seventh, Leonard Willey.

Get of Sire—First, B. M. Boyer & Sons; second, B. M. Boyer & Sons; third, Jas. K. Helmick & Son; fourth, Bruce R. Vale; fifth, J. L. Barber; sixth, J. L. Barber; seventh, E. L. Nagle & Son.

Produce of Dam—First, Bruce R. Vale; second, J. L. Barber; third, J. L. Barber; fourth, B. M. Boyer & Sons; fifth, E. L. Nagle & Son; sixth, Ledru C. Willits; seventh, John Branchle.

CHESTER WHITE FUTURITY.

Fall Boar—First, J. H. & Duke Mahannah on O. K.'s Greater Iowan, 88807; second, E. L. Nagle & Son on Medler, 19803; third, Ledru C. Willits on High Big Bone, 88331; fourth, Leonard Willey on Jim's Equal, 88623; fifth, Jas. K. Helmick & Son on Anak's Prince, 89237.

Fall Sow—First, B. M. Boyer & Sons on Prince's Giantess, 206192; second, E. L. Nagle & Son on Lilly 1st, 34768; third, Bruce R. Vale on Rose, 209570; fourth, Ledru C. Willits on Ruth Law 2nd, 206230; fifth, B. M. Boyer & Sons on Prince's Giantess 2nd, 206186.

Spring Boar—First, J. L. Barber on Chief Justice 2nd, 89913; second, E. L. Nagle & Son on Captain, 88897; third, M. E. Kinney on Mountain, 88507; fourth, M. P. Herbert on The Bear Cat, 89167; fifth, E. L. Nagle & Son on Joe, 88899; sixth, J. H. Lachmiller on Prince Anak, 87999; seventh, R. B. Craft & Cameron on Long Prince, 89289; eighth, R. B. Craft & Cameron on Long Sensation, 89291.

Spring Sow—First, Ledru C. Willits on High Miss, 206214; second, J. L. Barber on City Belle 2nd, 208974; third, B. M. Boyer & Sons on Col's Princess, 206190; fourth, R. H. Rockafellow on H. W. Lady, 207210; fifth, E. L. Nagle & Son on Ruth, 207204; sixth, R. E. Williams on Annabelle, 208270; seventh, B. M. Boyer & Sons on Col's Princess 2nd, 206182; eighth, Arthur W. Runft on Lenora's O. K. 1st, 206822.

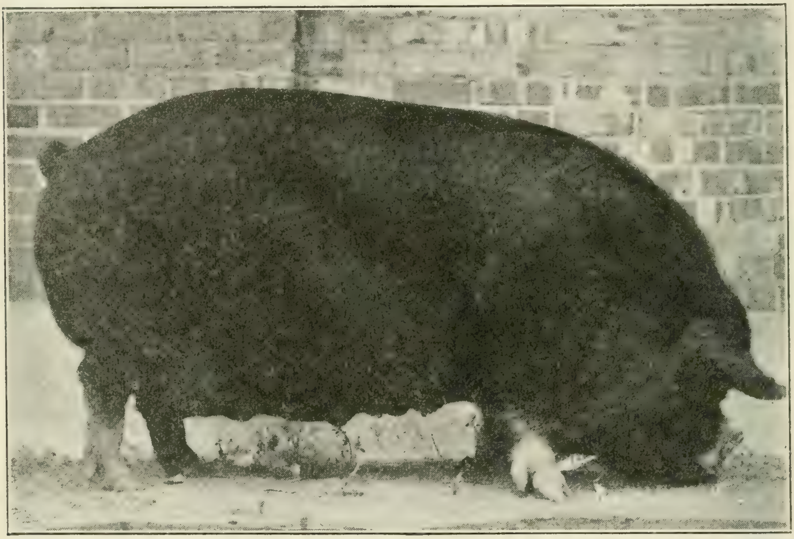
Spring Pigs, Litter of Four—First, J. L. Barber; second, J. L. Barber; third, Ledru C. Willits; fourth, M. P. Herbert; fifth, E. L. Nagle & Son; sixth, B. M. Boyer & Sons; seventh, Arthur W. Runft; eighth, H. L. Crosby.

BERKSHIRE.

Exhibitors—Gossard Breeding Estates, Martinsville, Ind.; C. G. Nash, Eskridge, Kansas; J. R. Nickel & Sons, Arenzville, Ill.; Rookwood Farm, Ames; T. A. Harris & Son, Lamine, Mo.

Judge............................Wilson Rowe, Davenport, Iowa

Aged Boar—First, Gossard Breeding Estates on Epochal's Prime Minister, 273554; second, C. G. Nash on Bacon's Longfellow 2nd, 236941; third, Rookwood Farm on Diplomat, 263000; fourth, J. H. Nickel & Sons on Master's Cedric 5th, 253723; fifth, T. A. Harris & Son on Handsome Duke 30th, 263500; sixth, T. A. Harris & Son on Handsome Duke 17th, 254700.



EPOCHAL'S AMERICAN MAYFLOWER.

Grand Champion Berkshire Sow. Gossard Breeding Estate, Martinsville, Ind.

Senior Yearling Boar—First, Rookwood Farm on Lord Bacon 9th, 251000; second, C. G. Nash, on E. H. Longfellow 55th, 278919; third, T. A. Harris & Son on Handsome Duke 45th, 269233; fourth, T. A. Harris & Son on Handsome Duke 44th, 269232; fifth, J. H. Nickel & Sons on Belle's Starlight, 267555.

Junior Yearling Boar—First, J. H. Nickel & Sons on Belle's Starlight 7th, 282607; second, T. A. Harris & Son on Sunnyside Lee 22nd, 28500; third, J. H. Nickel & Sons on Sterling's Superb 2nd, 273242; fourth, T. A. Harris & Son on Handsome Duke 51st, 284400; fifth, Rookwood Farm on Ames' Rival, 213.

Senior Boar Pig—First, Gossard Breeding Estate on Laurel's Epochal, 291214; second, Gossard Breeding Estate on Laurel's Epochal 2nd, 291215; third, Rookwood Farm on Ames' Rival 209, 285883; fourth, T. A. Harris & Son on Sunnyside Lee 22nd, 286926; fifth, Rookwood Farm on Ames Rival 210, 285884; sixth, J. H. Nickel & Sons on Handsome Noble, 290393.

Junior Boar Pig—First, Rookwood Farm on Laurel's Epoch, 291100; second, Gossard Breeding Estates on Laurel's Epochal 8th, 291098; third, Gossard Breeding Estates on Laurel's Epochal 10th, 291104; fourth, J. H. Nickel & Sons on Grenadier's Star 2nd, 290921; fifth, C. G. Nash; sixth, T. A. Harris & Son; seventh, C. G. Nash; eighth, J. H. Nickel & Sons on Grenadier's Star 3rd, 290922; ninth, T. A. Harris on Epochal's King.

Aged Sow—First, Gossard Breeding Estate on Epochal's American Mayflower. 241600; second, Gossard Breeding Estate on Epochal's American Sunflower 2nd, 255853; third, Rookwood Farm on Royal Lady 65, 237767; fourth, J. H. Nickel & Sons on Lady Fairview 3rd, 228079; fifth, T. A. Harris & Son on Handsome Duchess 95, 263555; sixth, C. G. Nash on Fancy Marie, 265870; seventh, Rookwood Farm on Matchless Beauty 19, 254655.

Senior Yearling Sow—First, C. G. Nash on Classy Clara, 268883; second, Gossard Breeding Estate on Epochal Sallie 8th, 273575; third, T. A. Harris & Son on Sunnyside Duchess 24, 269199; fourth, T. A. Harris & Son on Sunnyside Duchess 25, 269201; fifth, J. H. Nickel & Sons on Schoolmaster's Miss A., 267567; sixth, Rookwood Farm on Epochal's Champion Mayflower, 275495.

Junior Yearling Sow—First, Gossard Breeding Estate on Epochal Springflower 3rd, 277487; second, Gossard Breeding Estate on Epochal Leader Mayflower, 273581; third, C. J. Nash on Circus Girl 52, 276195; fourth, J. H. Nickel & Sons on Grenadier's Countess III, 284719; fifth, J. H. Nickel & Sons on Grenadier's Reality, 273250; sixth, T. A. Harris & Son on Handsome Duchess 125, 284245; seventh, T. A. Harris & Son on Handsome Duchess 124, 284244.

Senior Sow Pig—First, C. G. Nash on Lady Sunset 2nd, 283604; second, Rookwood Farm on Rookwood Duchess 19, 285879; third, Gossard Breeding Estates on Winona Laurel 26th, 279168; fourth, Gossard Breeding Estates on Winona Epochal Laurel, 278004; fifth, C. G. Nash on Classy Clara 2nd, 283602; sixth, Rookwood Farm on Rookwood Duchess 21; seventh, T. A. Harris & Son on M. Premier Duchess 6th, 287530.

Junior Sow Pig—First, Gossard Breeding Estates on Epochal Laurel 5th; second, Gossard Breeding Estates on Epochal Laurel 3rd; third, C. G. Nash; fourth, C. G. Nash; fifth, J. H. Nickel & Son on Grenadier's Mistress, 290925; sixth, J. H. Nickel & Son on Perfecto's Rebecca, 290915; seventh, T. A. Harris & Son.

Senior Champion Boar—Rookwood Farm on Lord Bacon 9th, 251000.

Junior Champion Boar—Gossard Breeding Estates on Laurel's Epochal 291214.

Grand Champion Boar, Any Age—Rookwood Farm on Lord Bacon 9, 251000.

Senior Champion Sow—Gossard Breeding Estate on Epochal's American Mayflower 241600.

Junior Champion Sow—C. G. Nash on Lady Sunset 2, 283602.

Grand Champion Sow, Any Age—Gossard Breeding Estate on Epochal's American Mayflower, 241600.

Aged Herd Owned by Exhibitor—First, Gossard Breeding Estate; second, Rookwood Farm; third, C. G. Nash; fourth, J. H. Nickel & Sons; fifth, J. H. Nickel & Sons; sixth, T. A. Harris & Son; seventh, T. A. Harris & Son.

Aged Herd Owned and Bred by Exhibitor—First, Gossard Breeding Estate; second, C. G. Nash; third, J. H. Nickel & Sons; fourth, J. H. Nickel & Sons; fifth, T. A. Harris & Son; sixth, T. A. Harris & Son.

Young Herd Owned by Exhibitor—First, Gossard Breeding Estates; second, Gossard Breeding Estates; third, Rookwood Farm; fourth, C. G. Nash; fifth, J. H. Nickel & Son; sixth, J. H. Nickel & Son; seventh, T. A. Harris & Son.

Young Herd Owned and Bred by Exhibitor—First, Gossard Breeding Estates; second, Rookwood Farm; third, C. G. Nash; fourth, J. H. Nickel & Sons; fifth, J. H. Nickel & Sons; sixth, T. A. Harris & Son.

Get of Sire—First, Gossard Breeding Estates; second, J. H. Nickel & Sons; third, Rookwood Farm; fourth, Gossard Breeding Estates; fifth, C. G. Nash; sixth, T. A. Harris & Son; seventh, T. A. Harris & Son.

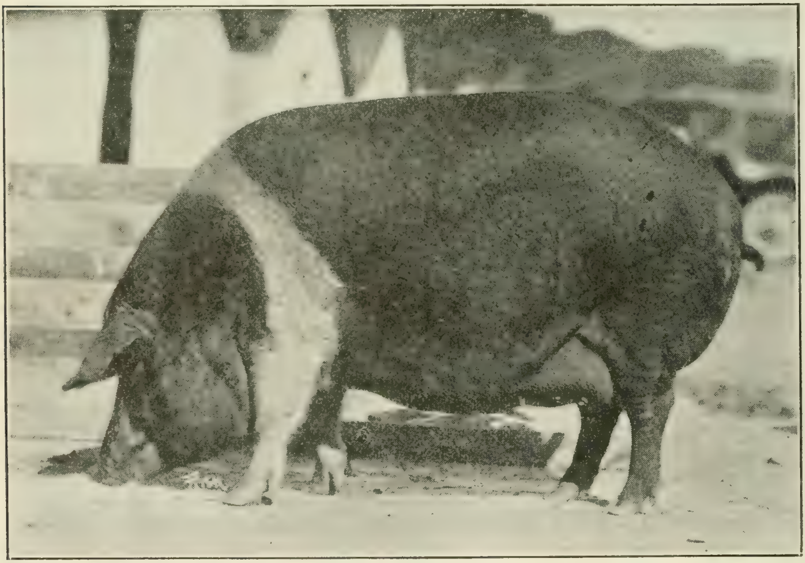
Produce of Dam—First, Rookwood Farm; second, Gossard Breeding Estates; third, C. G. Nash; fourth, T. A. Harris & Son; fifth, T. A. Harris & Son; sixth, J. H. Nickel & Sons; seventh, J. H. Nickel & Sons.

HAMPSHIRE.

EXHIBITORS—Jos. F. Brenner, Mapleton; Boekelman Bros. & Luderman, Paullina; Carl Briley, Ontario; Sherman J. Brady, Milton; C. S. Bratt & Son, Arapahoe, Neb.; P. P. Ceder, Genoa, Neb.; T. C. Cole, Thurman; Cole & Jay, Thurman; Cassady & Karr, Whiting; Cassady & Behrens, Whiting; G. S. Erb, Pleasantville; G. T. Hodge, Genoa, Neb.; James Harpole, Patterson; M. Houghtaling & Son, Grimes; E. R. Hern, Selma; L. T. Hibbs, Legrand; N. B. Hoskin & Son, Cantril; Joy & Rogers, Ames; E. E. Johnson, Genoa, Neb.; Fred W. Kettler, Mankato, Minn.; Geo. Lee, Ute; McConnell Bros., Waukee, R. F. D. 1; George Rowe, Milton; Richard C. Miller, Springville; M. C. Morrison, Adelphi; R. G. Machrill, Griswold; Clayton Messenger, Keswick, R. F. D. No. 1; Neddermeyer Bros., Ute; John H. Oliver, Kewaunee, Ill.; C. P. Paulson, Nora, Neb.; R. L. Pemberton, Legrand; R. C. Pollard, Nehawka, Neb.; Art Shaw, Oskaloosa; Leo B. Streck, Mapleton; J. N. Summers, Malvern; John H. Somerville, Gilman; H. E. Taylor, Dallas Center; Turner Bros., De Witt; F. W. Timmerman, West Liberty; Elmer Tow, Martelle; B. Wolph, Nehawka, Neb.; Boyd G. Weidlein, Webster City; Albert Weiss, Denison; Wickfield Farm, Cantril; W. F. Yingst & Son, State Center.

JUDGE..................................T. A. FLENNER, Ashmore, Ill.

Senior Yearling Sow—First, Art Shaw on Eugina, 161832; second, F. W. Timmerman on Alice Pershing, 159098; third, Wickfield Farms on Trixie Lookout Again, 177332; fourth, P. P. Ceder on Hawkeye Lady 3rd, 157378; fifth, F. W. Timmerman on Harold's Wild Rose, 179190; sixth, M. C. Morrison on Miss Primrose, 208612; seventh, E. E. Johnson on Victory Queen, 163046; eighth, Houghtaling & Son on Marie, 179378.



COZY LOOKOUT 1ST.

Senior and Grand Champion Hampshire Sow. F. W. Timmerman, West Liberty, Iowa.

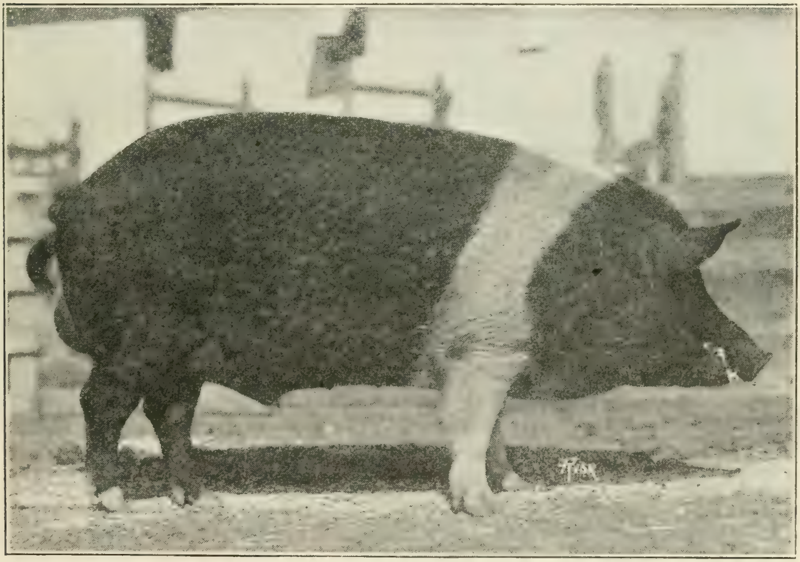
Junior Yearling Sow—First, E. E. Johnson on Silver Queen I Am, 209066; second, E. E. Johnson on Silver Queen I Am 2nd, 209068; third, M. C. Morrison on Mayflower Lass, 208610; fourth, R. C. Pollard on May

Queen, 173270; fifth, Wickfield Farms on Wickwave Lady, 162090; sixth, C. P. Paulsen on Paulsen's Lady 11th, 164360; seventh, Elmer Tow on Josie B., 165260; eighth, F. W. Timmerman on Tommy's Maid, 165756.

Senior Sow Pig—First, Wickfield Farms on Rosy May Lookout; second, M. C. Morrison on Hawkeye Princess, 208616; third, C. S. Bratt & Son on Bratt De Kalb's Queen 6th; fourth, Wickfield Farms on Fannie Wickwave; fifth, E. E. Johnson on Nebraska Queen, 209072; sixth, Art Shaw on Irish Rose; seventh, F. W. Timmerman on Nora's Maid, 211822; eighth, R. C. Pollard on Springflower 5th, 208652.

Junior Sow Pig—First, B. Wolph; second, Addie Wollman on Miss Jane Lookout; third, J. N. Summers on Queen Mills 39th, 210884; fourth, Elmer Tow on Wildfire; fifth, C. S. Bratt & Son on Bratt's De Kalb Queen; sixth, C. P. Paulsen on Nebraska Queen II, 208940; seventh, Art Shaw on ——; eighth, Clarence Powell on Paul's Pride.

Aged Boar—First, F. W. Timmerman on Wickwave Tommy, 58193; second, R. L. Pemberton on Sioux Lad, 82431; third, C. P. Paulsen on Nora's Cherokee 1st, 45225; fourth, Geo. T. Hodge on The Governor, 72971; fifth, Turner Bros. on Scottish Lad III, 36725; sixth, T. C. Cole on Lookout Boy, 53287; seventh, Joy & Rogers on Better Way Profit, 58283; eighth, Neddermeyer Bros. on Cherokee Pattern Jr. 2nd, 59627.



COLE'S GIANT.

First Junior Yearling Boar, Senior and Grand Champion Hampshire Boar. Dr. T. C. Cole, Thurman, Iowa.

Senior Yearling Boar—First, Wickfield Farms on Lookout Broadway, 74755; second, McConnell Bros. on Waukee Lad, 71443; third, Wickfield Farms on Chin's Giant, 81083; fourth, James Harpole on Lookout Lad's Equal, 73071; fifth, E. E. Johnson on Woodrow's Victory, 74929; sixth, F. W. Timmerman on Lookout Getaway, 74365; seventh, John H. Somerville on Perfecto's Model, 73865; eighth, P. P. Ceder on Hawkeye Lad, 72615.

Junior Yearling Boar—First, T. C. Cole on Cole's Giant, 74547; second, R. C. Pollard on Victory Giant Jr., 80307; third, Wickfield Farms on Lookout Monarch; fourth, Leo B. Streck on Choice De Kalb King, 75269; fifth, Bockelman Bros. & Ludeman on Sensation Jr., 74111; sixth, Wickfield Farms on Lookout Quicksilver, 80089; seventh, Elmer Tow on Lookout Cherokee, 76393; eighth, Boyd G. Weidlein on Lookout Starlight, 80313.

Senior Boar Pig—First, Art Shaw on Shaw's Giant; second, Wickfield, Farms on Wickwave Rancher; third, Neddermeyer Bros. on Neddermeyer's Star 1st; fourth, Turner Bros. on Cookey, 90181; fifth, M. C. Morrison on Hawkeye Marvel, 89683; sixth, Wickfield Farms on Wickwave Farmer; seventh, R. L. Pemberton on Premium's Model; eighth, C. S. Bratt & Son on Bratt's DeKalb's King.

Junior Boar Pig.—First, Cole & Joy on Wickwave Monarch, 90607; second, Wickfield Farms on Lookout Leader; third, P. C. Pollard on Pollard's Star 95, 90945; fourth, C. P. Paulsen on Paulsen's Star 300rd, 89873; fifth, R. L. Pemberton; sixth, L. T. Hibbs on Northern King, 91607; seventh, R. C. Pollard on Cornhusker Lad 89737; eighth, M. Houghtaling & Son on ———.

Aged Sow—First, F. W. Timmerman on Cozy Lookout I, 138288; second, F. W. Timmerman on Queen's Pride Again, 146026; third, Geo. T. Hodge on Grand Lady, 128142; fourth, C. P. Paulsen on Choice Minnie 1st, 126178; fifth, Art Shaw on Shaw Girl, 93286; sixth, C. S. Bratt & Son on DeKalb's Queen 510th, 132642; seventh, P. P. Ceder on Messenger Girl, 157382; eighth, R. L. Pemberton on Lookout Maid, 90306.

Senior Champion Boar—First, Dr. T. C. Cole on Cole's Giant, 74547.

Junior Champion Boar—First, T. C. Cole & Joy on Wickware Monarch, 90607.

Grand Champion Boar, Any Age—First, T. C. Cole on Cole's Giant, 74547.

Senior Champion Sow—First, F. W. Timmerman on Cozy Lookout 1st.

Junior Champion Sow—First, Wickfield Farms on Roxy May Lookout.

Grand Champion Sow, Any Age—F. W. Timmerman on Cozy Lookout 1st.

Aged Herd Owned by Exhibitor—First, F. W. Timmerman; second, Wickfield Farms; third, C. P. Paulsen; fourth, Elmer Tow; fifth, C. S. Bratt & Son; sixth, Wickfield Farms; seventh, Boyd G. Weidlein; eighth, F. W. Timmerman.

Aged Herd, Owned and Bred by Exhibitor—First, Wickfield Farms; second, F. W. Timmerman; third, R. L. Pemberton; fourth, E. E. Johnson; fifth, C. S. Bratt & Son; sixth, Boyd G. Weidlein; seventh, Art Shaw; eighth, P. P. Ceder.

Young Herd Owned by Exhibitor—First, Wickfield Farms; second, T. C. Cole & Joy; third, R. C. Pollard; fourth, C. C. Paulsen; fifth, Art Shaw; sixth, Neddermeyer Bros.; seventh, Wickfield Farms; eighth, C. S. Bratt & Son.

Young Herd, Owned and Bred by Exhibitor—First, Wickfield Farms; second, T. C. Cole & Joy; third, R. C. Pollard; fourth, C. P. Paulsen; fifth, Art Shaw; sixth, Wickfield Farms; seventh, C. S. Bratt & Son; eighth, F. W. Timmerman.

Get of Sire—First, Wickfield Farms; second, Wickfield Farms; third, E. E. Johnson; fourth, R. C. Pollard; fifth, C. P. Paulsen; sixth, C. S. Bratt & Son; seventh, Neddermeyer Bros.; eighth, Boyd G. Weidlein.

Produce of Dam—First, E. E. Johnson; second, R. C. Pollard; third, Wickfield Farms; fourth, C. P. Paulsen; fifth, C. S. Bratt & Sons; sixth, Boyd G. Weidlein; seventh, T. C. Cole & Joy; eighth, Neddermeyer Bros.

Special—Hampshire Advocate Special: Best pair of pigs (boar and sow) under 6 months shown by resident of Iowa—First, Cole & Joy.

Special Prizes—Offered by the American Hampshire Swine Record Association and the Iowa Hampshire Breeders' Association.

Four Pigs, Any Sex, Under Six Months, Bred and Exhibited by a Resident of Iowa—First, Wickfield Farms; second, F. W. Timmerman; third, L. T. Hibbs.

Offered by Iowa Hampshire Breeders' Association. Special Prize.

Boar Pig, Under Six Months, Shown by Resident of Iowa—First, R. L. Pemberton.

Sow Pig, Under Six Months, Shown by Resident of Iowa—First, Elmer Tow.

LARGE YORKSHIRE.

EXHIBITORS—B. F. Davidson, Menlo; Merle & Bennie Davidson, Menlo; W. H. Winn, Menlo.

JUDGE................................OTIS H. TUTTLE, Norway, Iowa

Aged Boar—First, B. F. Davidson on Oaklodge Sardis 31st, 53060.

Senior Yearling Boar—First, B. F. Davidson on Deer Creek Royal 16th, 27934; second, Otis Morris on Fair View Boy I, 27772.

Junior Yearling Boar—First, B. F. Davidson on Deer Creek Sardis 2nd, 27938.

First Prize Get of Sire Hampshire Swine. Wickfield Farms, Cantril, Iowa.

Senior Boar Pig—First, B. F. Davidson on Deer Creek Lee 18, 28884; second, Otis Morris on Fair View Boy 1st, 27772.

Junior Boar Pig—First, B. F. Davidson on Deer Creek Royal 18; second, B. F. Davidson on Deer Creek Remo 27; third, Merle & Bennie Davidson on Deer Creek B. I., 28901; fourth, Merle & Bennie Davidson on Deer Creek B. II, 28902; fifth, W. H. Winn on Guthrie Boy 17, 28909; sixth, W. H. Winn on Guthrie Boy 18, 28910; seventh, Otis Morris on Grand View Royal I.

Aged Sow—First, B. F. Davidson on Deer Creek Rena 7, 25919; second, B. F. Davidson on Deer Creek Elena 4th, 24198; third, B. F. Davidson on Deer Creek Ruby 5th, 26954.

Senior Yearling Sow—First, Otis Morris on Fair Lady 1st, 27766.

Junior Yearling Sow—First, Merle & Bennie Davidson on Deer Creek Della, 27958.

Senior Sow Pig—First, B. F. Davidson on Deer Creek Della 31, 28885.

Junior Sow Pig—First, B. F. Davidson on Deer Creek Rena 32; second, W. H. Winn on Maple Spring Queen 17, 28906; third, B. F. Davidson on Deer Creek Elena 22; fourth, Merle & Bennie Davidson on Deer Creek S. I., 28903; fifth, W. H. Winn on Maple Spring Queen 18, 28907; sixth, Merle & Bennie Davidson on Deer Creek S. II, 28904.

Senior Champion Boar—First, B. F. Davidson on Deer Creek Royal 16th, 27934.

Junior Champion Boar—First, B. F. Davidson on Deer Creek Royal 18th.

Grand Champion Boar, Any Age—First, B. F. Davidson, Deer Creek Royal 16th, 27934.

Senior Champion Sow—First, B. F. Davidson on Deer Creek Rena 7th, 25919.

Junior Champion Sow—First, B. F. Davidson on Deer Creek Rena 32.

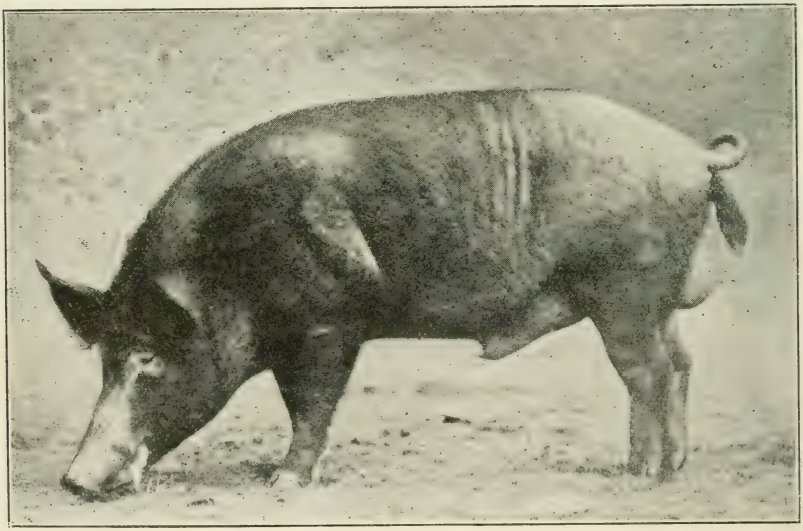
Grand Champion Sow, Any Age—First, B. F. Davidson on Deer Creek Rena 7th, 25919.

Aged Herd, Owned by Exhibitor—First, B. F. Davidson.

Aged Herd, Owned and Bred by Exhibitor—First, B. F. Davidson.

Young Herd, Owned by Exhibitor—First, B. F. Davidson; second, W. H. Winn; third, Merle & Bennie Davidson; fourth, Otis Morris.

Young Herd, Owned and Bred by Exhibitor—First, B. F. Davidson; second, Merle & Bennie Davidson; third, Otis Morris.



GLENARY 14.

Grand Champion Tamworth Boar. J. D. Justice & Son, Iowa City, Iowa.

Get of Sire—First, B. F. Davidson; second, W. H. Winn; third, Merle & Bennie Davidson; fourth, Otis Morris.

Produce of Dam—First, B. F. Davidson; second, W. H. Winn; third, Merle & Bennie Davidson; fourth, Otis Morris.

TAMWORTH.

EXHIBITORS—E. J. Andrle, Tiffin; Propst Bros., Iowa City; J. W. Justice & Son, Iowa City; B. O. Sleichter, Riverside; Dr. E. O. Thomas & Son, Route 2, Iowa City; W. A. Thomas, Route 2, Iowa City.

JUDGE.................................OTIS H. TUTTLE, Norway, Iowa

Aged Boar—First, Dr. E. O. Thomas & Son on Glenary Long Boy, 22046; second, J. W. Justice & Son on Buisson, 11975.

Senior Yearling Boar—First, Propst Bros. on Iowa Chief 4th, 23039;

Junior Yearling Boar—First, J. W. Justice & Son on Glenary XIV, 23039; second, Propst Bros. on Quiet Boy, 23643; third, Propst Bros. on Glenary 15th, 23040; fourth, Dr. E. O. Thomas & Son on Glenary Osker, 23756.

Senior Boar Pig—First, J. W. Justice & Son on Greenwood Irving's Pride, 24644; second, Propst Bros. on Dugan, 24577; third, Propst Bros. on Dinny of Ardmore, 24576; fourth, E. J. Andrle on Fred Glen, 24499; fifth, E. J. Andrle on Joe Glen, 24500; sixth, J. W. Justice & Son on Greenwood Triple Chief, 24645.

Junior Boar Pig—First, J. W. Justice & Son; second, J. W. Justice & Son; third, Propst Bros. on Duke of Ardmore, 24580; fourth, Propst Bros. on Bion of Ardmore, 24583; fifth, Dr. E. O. Thomas & Son on Glenary Jury, 24535; sixth, B. O. Sleichter.

Aged Sow—First, Dr. E. O. Thomas & Son on Miss Knowles XII, 21814; second, J. W. Justice & Son on Lady Rose of Greenwood, 24483; third, Propst Bros. on Loma VII, 19198.

Senior Yearling Sow—First, Propst Bros. on Greenwood Elba, 23051.

Junior Yearling Sow—First, Dr. E. O. Thomas & Son on Glenary X, 23035; second, Dr. E. O. Thomas & Son on Glenary XII, 23037; third, Propst Bros. on Dutch Sarah, 24360; fourth, J. W. Justice & Son on Lulu Belle, 23836; fifth, J. W. Justice & Son on Ardmore Perfection, 23837.

Senior Sow Pig—First, E. J. Andrle on Mary Glen, 24506; second, J. W. Justice & Son on Lady Rose of Greenwood II, 24639; third, Propst Bros. on Violet's Pride, 24575; fourth, E. J. Andrle on Hazel Glen, 24505; fifth, J. W. Justice & Son on Lady Rose of Greenwood III, 24640; sixth, Propst Bros. on Loma of Ardmore, 24579.

Junior Sow Pig—First, J. W. Justice & Son; second, Dr. E. O. Thomas & Son on Glenary Lura, 24551; third, J. W. Justice; fourth, W. A. Thomas on Oake Grove Nell; fifth, Dr. E. O. Thomas & Son on Glenary Stella, 24552; sixth, W. A. Thomas on Oake Grove Hazel.

Senior Champion Boar—First, J. W. Justice & Son on Glenary 14th.

Junior Champion Boar—First, J. W. Justice & Son on Greenwood Irving Pride.

Grand Champion Boar, Any Age—J. W. Justice & Son on Glenary 14th.

Senior Champion Sow—First, Dr. E. O. Thomas & Son on Miss Knowle XII.

Junior Champion Sow—First, J. W. Justice & Son.

Grand Champion Sow, Any Age—First, Dr. E. O. Thomas & Son on Miss Knowle XII.

Aged Herd, Owned by Exhibitor—First, J. W. Justice & Son; second, Dr. E. O. Thomas & Son; third, Propst Bros.

Young Herd, Owned by Exhibitor—First, J. W. Justice & Son; second, J. W. Justice & Son; third, Dr. E. O. Thomas & Son; fourth, Propst Bros.; fifth, W. A. Thomas; sixth, B. O. Sleichter.

Young Herd, Owned and Bred by Exhibitor—First, Dr. E. O. Thomas & Son; second, Propst Bros.; third, B. O. Sleichter; fourth, E. J. Andrle.

Get of Sire—First, J. W. Justice & Son; second, J. W. Justice & Son; third, Dr. E. O. Thomas & Son; fourth, Propst Bros.; fifth, W. A. Thomas; sixth, B. O. Sleichter.

Produce of Dam—First, J. W. Justice & Son; second, J. W. Justice & Son; third, Dr. E. O. Thomas & Son; fourth, Propst Bros.; fifth, W. A. Thomas; sixth, B. O. Sleichter.

BOYS' AND GIRLS' CLUB.

EXHIBITORS—Harold Albert, Reinbeck; Earl Bailey, Pleasant Plains; Leland Baker, Bondurant; Lorraine Baker, Bondurant; R. E. Benton, West Side; Dalbert Berry, Atlantic; Frank Berry, Prole; James Berry, Prole; Ralph Berry, Atlantic; Forest Bishop, Indianola; John Blake, Dallas Center; Mydrian Boyer, Farmington; Sherman Brady, Milton; Irwyn Bremmer, Vail; Chester Britton, Dallas Center; Virgil Brock, Adel; Arlene Brown, Webster City; James Buchanan, Adel; Ruby Buchanan, Arion; Willie Buchanan, Adel; George Burnstedt, Des Moines, R. F. D. 1; Carl Campbell, Iowa City; Samuel Cape, Grimes; Wilbert Carsens, Denison, R. F. D. 2; Alfred Carstens, Buck Grove; Emil Carstens, Buck Grove; Merton Chantland, Humboldt; Mildren Chalupa, Pleasant Plains; Ernest Clark, Mitchellville; Everett Clark, Mitchellville; Edna Crawford, Stockport; Clifford Copeland, Fairfield; Russell Davis, Menlo; Donald DeVotie, Mitchellville; Vernon DeVotie, Mitchellville; Grant U. Dowell, Bedford; Ellen Dreckman, Titonka; Merrill Finchem, Waukee; Paul Finchem, Waukee; Clio Flesher, Indianola; Dale Fox, Dallas Center; John Fox, Waukee; Marvin Fox, Waukee; Wendell Frazee, Bassett; Cecil Freel, Osceola; Arthur Frey, Patterson; Earl Frey, Patterson; Lester Fry, Patterson; Dwight Glick, Unionville; Eleanor Grulke, Atlantic; Willie Gruelke, Atlantic; Pearl Hagen, Norwalk; Arnold Hagge, Bondurant; Allen Hainline, Polk; Andrew Hainline, Polk; Harold Hamline, Polk; Clarence Hansen, Atlantic; Mildred Hansen, Atlantic; Charles Harpole, Patterson; Claude Harpole, Patterson; James Harpole, Patterson; Keith Haynes, Humboldt; Cecil Heavelin, Indianola; William Herbert, Atlantic; Mabel Hickman, Lacona; Charlie Hibbs, Legrand; Irwin Hogge, Bondurant; Flora Hoskins, Cantril; Leslie Hoskins, Cantril; Burton Huston, Waukee; Robert Jacobs, Lacona; Ralph James, New Virginia; Ethel Jipsen, Atlantic; Luin Jipsen, Atlantic; Bertha Johnson, Sheldahl; Genevieve Johnson, Sheldahl; Marjorie Johnson, Sheldahl; Peter E. Johannsen, Charter Oak; Homer Jones, Ainsworth; George Kain, Algona; Donald Kean, Grimes; Everett Kelloway, Anita; Paul Kelloway, Anita; Lee Kinney, Bondurant; George Knop, Atlantic; John Knop, Atlantic; Lydia Knop, Atlantic; Rush Koch, Brighton; W. H. Koch, Brighton; William J. Krol, Vail; Will C. Lacina, Iowa City; Arthur Lee, Batavia; Roy Lee, Batavia; Harry Longfellow, Blockton; Roy G. Longfellow, Blockton; Ben McClanahan, Mitchellville; Raymond McCutcheon, Denison; Arthur McIntosh, Bondurant; Melvin Madison, Guthrie Center; Eugene Mann, Brighton; Ralph Mann, Brighton; Edward Melroy, Winterset; Floyd Menial, Dallas Center; Harold Milgreen, Centerville; Fred W. Morgan, Kirkman; Donald S. Morris, Campbell; James Mortie, New Virginia; George Bullin, Perry; John Nissley, Dallas Center; Erin Oneth, Patterson; Fay Perry, Gilman; Edward Petersen, Denison; Johnnie D. Petersen, Denison; Clarence E. Powell, Denison; Charles Powell, Denison; Clarence Renand, Bondurant; C. L. Richardson, Vail; Ralph A. Richardson, Grimes; Walter Rundlett, Vail; Aubrey Russell, Indianola; Eugene Schooler, Carlisle; Ladwin Shannon, Waukee; O. W. Simmons, Jr., Guthrie Center; Johnny Smith, Linby; Paul Smith, Atlantic; Vera Smith, Linby; Kenneth Stephenson, Corwith; Frances Stucker, Brighton; Lola Stucker, Brighton; Clark Tolles, Bondurant; Mabel Thompson, Atlantic; Opal Thompson, Atlantic; Zella Thompson, Atlantic; Thomas Tomlinson, Bondurant; Mildred Tompson, Atlantic; George Trindle, Dallas Center; Jennie Turner, DeWitt; John Turner, DeWitt; Willie Turner, DeWitt; Everett Turnipseed, Fairfield; Mylo Twedt, Legrand; Myron Twedt, Legrand; Bernard Tyman, Bondurant; Lyman Upton, Eldora; Ollie Wagaman, Dexter; Vincent Walsh, Pioneer; Cecil Waltemeyer, Melbourne; Donald Warner, Humboldt; Max Warner, Humboldt; Walter W. Webster, Runnells; Walter Weiss, Denison; Donald Whittaker, Fairfield; Hazel Whittaker, Fairfield; Alfred Wolcott, Gilmore City; Addie Wollman, Cantril; Harold Zellmer, Atlantic; Oscar Zelmer, Atlantic.

JUDGE.................................H. H. KILDEE, Ames

HAMPSHIRE.

Boars—First, Charlie Hibbs; second, James Harpole on Patterson's Boy, 89155; third, Jennie Turner; fourth, Schrman Brady on Sweepstake, 90697; fifth, Walter Weiss; sixth, Willie Turner; seventh, John Turner; eighth, Leslie V. Hoskin on Lookout Kelley; ninth, Clarence Powell; tenth, Peter E. Johannsen.

Sows—First, Howard Gray; second, Addie Wollam on Miss Jane Lookout; third, Walter Weiss; fourth, Willie Turner; fifth, Flora Hoskin on Vera Lee; sixth, Burton Huston; seventh, Clarence Powell; eighth, Claude Harpole on Fern's Lady, 206254; ninth, Charley Hibbs; tenth, Hazel Whitaker on Violet.

Litter—First, Charlie Hibbs; second, Walter Weiss; third, Clarence Powell; fourth, Leslie Hoskin; fifth, Irvyn Bremmer.

CHESTER WHITE SECTION.

Boars—First, Charles Powell; second, Roy C. Longfellow; third, Wm. Herbert on Bear Cat; fourth, Harry Longfellow; fifth, Paul Smith; sixth, Ethel Jipsen; seventh, Floyd McKissick; eighth, Arlene Brown on White Monarch, 88993; ninth, Mydrian Boyer on Col. Prince, 88299; tenth, Linn Jipsen.

Sows—First, Roy C. Longfellow; second, Harry Longfellow; third, Mildred Thompson on Bobs; fourth, Harriet Woodlow; fifth, Arlene Brown on Lady Ensign, 207426; sixth, Everett McKissick; seventh, William Herbert on The Kitten; eighth, Paul Smith; ninth, Charles Powell; tenth, Mydrian Boyer on Col. Princess 3rd.

Litter—First, Charles Powell; second, William Herbert; third, Mydrian Boyer; fourth, Arlene Brown; fifth, Walter Rundlett.

DUROC JERSEY.

Boars—First, Cecil Waltemeyer; second, Hans Jorgenson; third, George Knap; fourth, Harold Zellmar; fifth, George Trindle; sixth, Lydia Knap; seventh, Opal Thomson; eighth, Mildred Hansen; ninth, Clifford Copeland on Royal Diamond, 359757; tenth, Myron Twedt.

Sows—First, Robert Jacobs on Pathfinder Lady; second, Alvin Jorgensen; third, Geo. Kain; fourth, Davis Coleman; fifth, Eugene Schooler on Fancy Orien; sixth, Zella Thomson; seventh, Mable Thomson; eighth, George Trindle; ninth, Harold Zellmar; tenth, Russell Davis on Ultimate Sensation.

Litter—First, Cecil Waltemeyer; second, Alvin Jorgensen; third, George Knap; fourth, George Trindle; fifth, Mylo Twedt.

POLAND CHINA.

Boars—First, O. W. Simmons, Jr.; second, Fred W. Morgan on Chief Progressor; third, Raymond McCutcheon; fourth, Earl Tessman; fifth, M. O. Ehlert; sixth, Fay Perry; seventh, Earl Bailey on Bailey's Big Bob.

Sows—First, George Burnstedt; second, Edna Crawford on Bob's Favorite; third, M. O. Ehlert; fourth, Earl Tessman; fifth, Ralph A. Richardson on Miss Robette; sixth, John Knap; seventh, Orlin Reis.

Litter—First, O. W. Simmons, Jr.; second, John Knap; third, Fay Perry; fourth, Raymond McCutcheon; fifth, Merrill Finchem.

SPOTTED POLAND CHINA.

Boars—First, Edward Petersen; second, Johnnie D. Petersen.

Sows—First, Thomas Tomlinson on Spotted Queen, 85656; second, Arnold Hagge on English Lady, 85654; third, Edward Peterson; fourth, Johnnie D. Peterson; fifth, Grant U. Dowell on Lady Spot 4th.

Litter—First, Edward Petersen; second, Johnnie D. Petersen.

County exhibit to be made up of all pigs shown from one county. Award will be made 50% on number of animals shown and 50% individuality. Money to go to County Pig Club Organization. Ten pigs must be shown—First, Crawford county; second, Cass County Pig Club; third, Marshall county; fourth, Polk county; fifth, Dallas county; sixth, Van Buren county; seventh, Warren county; eighth, Jefferson county; ninth, Madison county; tenth, Buena Vista county.

FAT HOG SECTION.

Pure breds, grades or cross breds, all fed for market purposes—First, John Fox; second, Floyd Merical; third, Homer Jones on Betty; fourth, Dale Fox; fifth, Virgil Brock; sixth, Ladwin Shannon; seventh, Ladwin Shannon.

SHEEP DEPARTMENT.

Exhibitors—E. L. Bitterman, Nora Springs; A. J. Blakely & Son, Grinnell; C. S. Bratt & Son, Arapahoe, Neb.; D. W. Bruns, Sigourney; W. A. Buck, Humeston; C. C. Croxen, West Liberty; H. D. Eddingfield, Mt. Pleasant; Joe W. Edgar, New London; —. —. Freyermuth, Muscatine; Elmer Frye & Son, Corydon; John Graham & Son, Eldora; J. G. Hanmer, Ames; Edmund Hanson, Dean; Geo. E. Husted, Russell; W. R. Hauser, Union; Geo. Hauser, Union; H. Hazen & Son, Mt. Pleasant; Iowa State College, Ames; Arl Jeffers, Murray; Daniel Leonard & Sons, Corning; Harris M. Logan & Son, Hillsboro; McKerrow & Son, Pewaukee, Wis.; Maple Grove Farm, Ames; J. D. Moore & Son, Mt. Pleasant; F. A. Osen & Son, Anita; Art Shaw, Oskaloosa; Sherwood Bros., Shelbyville, Mo.; Roy W. Snyder, Union; C. G. Turner, Titonka; F. F. and O. R. Warner, Bloomfield; Ledru Willets, Mt. Pleasant; Williams Bros., Redfield; R. C. Yohe, Allerton.

Judge........................George E. Helser, La Fayette, Ohio

IOWA SWEEPSTAKES—Silver Loving Cup.

Best Ram, Two Years or Over—R. C. Yohe.

Best Ewe, All Mutton Breeds—W. R. Hauser.

MERINO CLASS "B."

Ram Two Years Old or Over—First, A. J. Blakely & Son on Molen & Lash 451; second, A. J. Blakely & Son on A. J. Blakely 2647.

Ram One Year Old and Under Two—First, A. J. Blakely & Son on A. J. Blakely 2695; second, A. J. Blakely & Son on A. J. Blakely 2699; third, Joe W. Edgar on Edgars 116.

Ram Under One Year—First, A. J. Blakely & Son on A. J. Blakely 2779; second, A. J. Blakely & Son on A. J. Blakely 2778.

Ewe Two Years Old or Over—First, A. J. Blakely & Son on A. J. Blakely 2637; second, Joe W. Edgar on Edgars 101; third, A. J. Blakely & Son on A. J. Blakely 2458; fourth, C. C. Croxen.

Ewe One Year Old and Under Two—First, A. J. Blakely & Son on S. Blamer & Son 1208; second, A. J. Blakely & Son on A. J. Blakely 2740.

Ewe Under One Year—First, A. J. Blakely & Son on A. J. Blakely 2806; second, A. J. Blakely & Son on A. J. Blakely 2807.

Champion Ram Any Age—A. J. Blakely on 2695.

Champion Ewe Any Age—A. J. Blakely on 2637.

Flock—A. J. Blakely & Son.

Get of Sire—A. J. Blakely & Son.

IOWA SPECIAL.

Ram Two Years Old or Over—First, A. J. Blakely & Son on A. J. Blakely 2647.

Ram One Year Old and Under Two—First, Joe Edgar on Edgars 116.

Ram Under One Year—First. A. J. Blakely & Son on A. J. Blakely 2778; second, A. J. Blakely & Son on A. J. Blakely 2767.

Ewe Two Years Old or Over—First, Joe W. Edgar; second, A. J. Blakely & Son on A. J. Blakely 2458.

Ewe One Year Old and Under Two—First, A. J. Blakely & Son on A. J. Blakely 2740.

Ewe Under One Year—First, A. J. Blakely & Son on A. J. Blakely 2807.

Champion Ram Any Age—A. J. Blakely on 2778.

Champion Ewe Any Age—Joe Edgar on Edgars 101.

Flock—First, A. J. Blakely & Son.

MERINO, CLASS "C."

Ram Two Years Old or Over—First, A. J. Blakely & Son on A. J. Blakely 2625; second, F. F. & O. R. Warner; third, F. F. & O. R. Warner; fourth, Joe W. Edgar on Edgars 110.

Ram One Year Old and Under Two—First, F. F. & O. R. Warner; second, A. J. Blakely & Son on A. J. Blakely 2719; third, F. F. & O. R. Warner; fourth, A. J. Blakely & Son on A. J. Blakely 2717.

Ram Under One Year Old—First, A. J. Blakely on A. J. Blakely 2766; second, A. J. Blakely & Son on A. J. Blakely 2765; third, Joe W. Edgar on Edgar's 124; fourth, F. F. & O. R. Warner.

Ewe Two Years Old or Over—First, A. J. Blakely & Son on A. J. Blakely 2465; second, F. F. & O. R. Warner; third, A. J. Blakely & Son on A. J. Blakely 2660; fourth, F. F. & O. R. Warner.

Ewe One Year Old and Under Two—First, A. J. Blakely & Son on A. J. Blakely 2741; second, A. J. Blakely & Son on A. J. Blakely 2742; third, F. F. & O. R. Warner; fourth, F. F. & O. R. Warner.

Ewe Under One Year—First, Joe W. Edgar on Edgar's 125; second, A. J. Blakely & Son on A. J. Blakely 2804; third, A. J. Blakely & Son on A. J. Blakely 2809; fourth, F. F. & O. R. Warner.

Champion Ram Any Age—A. J. Blakely on 2625.

Champion Ewe Any Age—A. J. Blakely on 2465.

Flock—First, A. J. Blakely & Son; second, F. F. & O. R. Warner; third, Joe W. Edgar.

Get of Sire—First, A. J. Blakely & Son; second, Joe W. Edgar; third, F. F. & O. R. Warner.

IOWA SPECIAL.

Ram Two Years Old and Over—First, F. F. & O. R. Warner; second, Joe W. Edgar on Edgars 110.

Ram One Year Old and Under Two—First, A. J. Blakely & Son on A. J. Blakely 2719; second, F. F. & O. R. Warner; third, A. J. Blakely & Son on A. J. Blakely 2717.

Ram Under One Year—First, A. J. Blakely & Son on A. J. Blakely 2765; second, Joe W. Edgar on Edgar's 124; third, A. J. Blakely & Son on A. J. Blakely 2764.

Ewe Two Years Old or Over—First, F. F. & O. R. Warner; second, A. J. Blakely & Son on A. J. Blakely 2660; third, F. F. & O. R. Warner.

Ewe One Year Old and Under Two—First, A. J. Blakely & Son on A. J. Blakely 2742; second, A. J. Blakely & Son on A. J. Blakely 2734; third, F. F. & O. R. Warner; fourth, F. F. & O. R. Warner.

Ewe Under One Year—First, A. J. Blakely & Son on A. J. Blakely 2804; second, A. J. Blakely & Son on A. J. Blakely 2803; third, F. F. & O. R. Warner.

Champion Ram, Any Age—A. J. Blakely on 2719.

Champion Ewe, Any Age—F. F. & O. R. Warner on 1058.

Flock—First, F. F. & O. R. Warner; second, A. J. Blakely & Son; third, Joe W. Edgar.

Get of Sire—First, Joe W. Edgar; second, F. F. & O. R. Warner.

RAMBOUILLET.

Ram Two Years Old or Over—First, Art Shaw on Reg Pending.

Ram One Year Old and Under Two—First, Iowa State College on 112847.

Ewe Two Years Old and Over—First, Iowa State College on 8542; second, Art Shaw on 482.

Ewe One Year Old and Under Two—First, Iowa State College on 112845; second Iowa State College on 112846.

Ewe Under One Year—First, Iowa State College; second, Iowa State College.

Champion Ram, Any Age—Iowa State College on 112847.

Champion Ewe, Any Age—Iowa State College.

Flock—First, Iowa State College.

Get of Sire—First, Iowa State College.

COTSWOLD.

JUDGE............................C. N. MCFARLAND, Mt. Glenn, Ohio

Ram Two Years Old or Over—First, Maple Grove Farm on Maple Grove's 310 86718; second, Joe W. Edgar on Edgar's 226; third, Geo. Allen & Son; fourth, Joe W. Edgar on Edgar's 271, 94788.

Ram One Year Old and Under Two—First, Joe W. Edgar on Edgar's 291; second, Maple Grove Farm on 97615; third, Joe W. Edgar on Edgar's 290; fourth, Elmer Frye & Sons on E. Frye & Sons' 40.

Ram Under One Year—First, G. E. Husted; second, G. E. Husted; third, Maple Grove Farm on Maple Grove's 417; fourth, Joe W. Edgar on Edgar's 300.

Ewe Two Years Old or Over—First, Ray W. Snyder on Shores 827, 92543; second, C. C. Croxen; third, Maple Grove Farm on Maple Grove's 328, 92424; fourth, G E. Husted on 89121.

Ewe One Year Old and Under Two—First, Ray W. Snyder on Mossley Lass 97, 98870; second, Maple Grove Farm on Maple Grove's 339, 97603; third, C. C. Croxen on 97538; fourth, Geo. Allen & Son.

Ewe Under One Year—First, Geo. E. Husted; second, Maple Grove Farm on Maple Grove's 418; third, Elmer Frey & Sons on E. Frey & Sons 43; fourth, Geo. E. Husted.

Champion Ram, Any Age—Maple Grove Farm on 310.

Champion Ewe, Any Age—R. W. Snyder on Shores 827.

Flock—First, Joe W. Edgar; second, Ray W. Snyder; third, Maple Grove Farm.

Get of Sire—First, Geo. E. Husted; second, Elmer Frey & Sons; third, Joe W. Edgar.

IOWA SPECIAL (COTSWOLD).

Ram Two Years Old or Over—First, Joe W. Edgar on Edgar's 226, 82937, second, Joe W. Edgar on Edgar's 271, 94788; third, Geo. E. Husted on 101669.

Ram One Year Old and Under Two—First, Joe W. Edgar on Edgar's 291, 97543; second, Joe W. Edgar on Edgar's 290, 97542; third, Elmer Frey & Sons on E. Frey & Sons 28.

Ram Under One Year—First, Geo. E. Husted on 243; second, Geo. E. Husted on 255; third, Maple Grove Farm on Maple Grove's 417.

Ewe Two Years Old or Over—First, Joe W. Edgar on Edgar's 224, 82935; second, Maple Grove Farm on Maple Grove's 328, 92424; third, Geo. E. Husted no 89121.

Ewe One Year Old and Under Two—First, Maple Grove Farm on Maple Grove's 339, 97603; second, Joe W. Edgar on Edgar's 286, 97538; third, Geo. E. Husted on 97653.

Ewe Under One Year—First, Maple Grove Farm on Maple Grove's 418; second, Elmer Frey & Sons on E. Frey & Sons 43; third, Geo. E. Husted on 242.

Champion Ram, Any Age—Joe Edgar on 491.

Champion Ewe, Any Age—Joe Edgar on 224.

Flock—First, Joe W. Edgar; second, Geo. E. Husted; third, E. Frey & Sons.

Get of Sire—First, Elmer Frey & Sons; second, Joe W. Edgar.

SPECIAL PRIZES OFFERED BY THE AMERICAN COTSWOLD REGISTRY ASSOCIATION.

Four Lambs, Either Sex, Get of One Sire, Bred and Owned by Exhibitor in Iowa—First, Geo. E. Husted; second, Elmer Frey & Sons.

LINCOLN AND LEICESTER.

Ram Two Years Old or Over—First Ray W. Snyder on Bowhill Stamp 21384; second, Geo. Allen & Son on 5114; third, Geo. Allen & Son on 5105.

Ram One Year Old and Under Two—First, Ray W. Snyder on McPhails 46, 39715; second, Geo. Allen & Son on 5468; third, Geo. Allen & Son on 5469.

Ram Under One Year—First, Geo. Allen & Son on 5482; second, Ray W. Snyder on Iowa Ladd 21982; third, Geo. Allen & Son on 5483.

Ewe Two Years Old or Over—First, Ray W. Snyder on Bowhill Ruby 11, 21457; second, Ray W. Snyder on Parkinsons 1352, 35138; third, Geo. Allen & Son on 5107.

Ewe One Year Old and Under Two—First, Ray W. Snyder on Lady Douglas 24, 15177; second, Ray W. Snyder on Parkinsons 1454, 39716; third, Geo. Allen & Son on 5110.

Ewe Under One Year—First, Geo. Allen & Son on 5531; second, Geo. Allen & Son on 5530; third, Ray W. Snyder on Iowa Lady 12286.

Champion Ram, Any Age—R. W. Snyder on Bowhill Stamp.

Champion Ewe, Any Age—R. W. Snyder on Lady Douglas.

Flock—First, Ray W. Snyder on Lincoln; second, Geo. Allen & Son.

Get of Sire—First, Geo. Allen & Son.

HAMPSHIRE DOWNS.

Ram Two Years Old or Over—First, Sherwood Bros. on 25348; second, Sherwood Bros, on 23928; third, Iowa State College on Iowa State College 584, 25465; fourth, Geo. Allen & Son on 4838; fifth, Geo. Allen & Son on 4837.

Ram One Year Old and Under Two. First, Iowa State College on 30269; second, F. A. Osens on Osens 35205; third, Geo. Allen & Son on 5387; fourth, Geo. Allen & Son on 5402; fifth, J. G. Hanmer on 31709.

Ram Under One Year—First, Sherwood Bros. on 59148; second, Ray W. Snyder on Kelleys 941, 34865; third, Iowa State College on 779; fourth, Sherwood Bros. on 35254; fifth, Iowa State College on 851.

Ewe Two Years Old or Over—First, Ray W. Snyder on Wilsons 439, 1105; second, Sherwood Bros. on 59148; third, Sherwood Bros. on 62782; fourth, John Graham & Son on Grahams 52348; fifth, Iowa State College on 59232.

Ewe One Year Old and Under Two—First, Sherwood Bros. on 69774; second, Iowa State College on 67936; third, Iowa State College on 67933; fourth, Sherwood Bros. on 69772; fifth, Ray W. Snyder on Telfers 118, 75781.

Ewe Under One Year—First, Iowa State College on 766; second, Iowa State College on 764; third, Sherwood Bros. on 704; fourth, Sherwood Bros. on 705; fifth, Ray W. Snyder on Kelley's 958, 75924.

Champion Ram Any Age—Sherwood Bros. on 25348.

Champion Ewe Any Age—R. W. Snyder on Wilson's 439, 1105.

Flock—First, Sherwood Bros.; second, Iowa State College; third, Ray W. Snyder; fourth, John Graham & Son.

Get of Sire—First, Iowa State College; second, Sherwood Bros.; third, E. L. Bittermans; fourth, Ray W. Snyder.

IOWA SPECIALS (HAMPSHIRE DOWNS).

Ram Two Years Old or Over—First, John Graham & Son on Graham's 1310; second, John Graham & Son on Graham's 25522.

Ram One Year Old and Under Two—First, John Graham & Son on Graham's 35262; second, E. L. Bittermans on Bittermans' 30020; third, John Graham & Son on Grahams' 35263.

Ram Under One Year—First, E. L. Bittermans on Bittermans' 158, 35126; second, E. L. Bittermans on Bittermans' 160, 35124; third, John Grahams & Son on Grahams' 35264.

Ewe Two Years Old or Over—First, John Graham & Son on Grahams' 52348; second, E. L. Bittermans on Bittermans' 106, 59287; third, John Graham & Son on Grahams' 46408.

Ewe One Year Old and Under Two—First, E. L. Bittermans on Bittermans' 67632; second, F. H. Osen & Son on Osen's 11, 76125; third, E. L. Bittermans on Bittermans' 67637.

Ewe Under One Year—First, E. L. Bittermans on Bittermans' 76076; second, John Graham & Son on Grahams 76172; third, John Graham & Son on Grahams 76173.

Champion Ram Any Age—John Graham on 35262.

Champion Ewe Any Age—John Graham & Son on 52348.

Flock—First, John Graham & Son; second, E. L. Bittermans; third, F. H. Osen & Son.

Get of Sire—First, E. L. Bittermans; second, John Graham & Son; third, F. H. Osen & Son.

SPECIAL PRIZES OFFERED BY THE AMERICAN HAMPSHIRE SHEEP ASSOCIATION.

Flock of Two Yearling Ewes, Two Ewe Lambs and Ram Any Age—First, John Graham & Son; second, Ed. Bitterman; third, F. H. Osen & Son.

SHROPSHIRE.

Ram Two Years Old or Over—First, Ledru Willets on Minton 307, 501323; second, C. G. Turner on Kelsey's Attraction 442284; third, Iowa State College on 483665; fourth, H. D. Eddingfield on 479863.

Ram One Year Old and Under Two—First, W. A. Buck on J. F. Jones 598; second, R. C. Yohe on 499902; third, Iowa State College on 498850; fourth, E. L. Bittermans on B. B's 499999.

Ram Under One Year—First, R. C. Yohe on 527494; second, R. C. Yohe on 527493; third, J. D. Moore & Son on 72; fourth, Iowa State College on 803.

Ewe Two Years Old or Over—First, H. D. Eddingfield on Eddingfield Farm 475524; second, R. C. Yohe on 483330; third, R. C. Yohe on 466492; fourth, Iowa State College on 447702.

Ewe One Year Old and Under Two—First, R. C. Yohe on 499895; second, E. L. Bittermans on B. Bros. 521469; third, Iowa State College on 522588; fourth, H. D. Eddingfield on Eddingfield Farm Reserve 498072.

Ewe Under One Year—First, D. W. Bruns on 529423; second, E. L. Bittermans on 527530; third, R. C. Yohe on 527513; fourth, J. D. Moore & Son.

Champion Ram, Any Age—Ledru Willets on Minton 307, 501323.

Champion Ewe, Any Age—R. C. Yohe on 499895.

Flock—First, R. C. Yohe; second, H. D. Eddingfield; third, E. L. Bittermans; fourth, Iowa State College.

Get of Sire—First, R. C. Yohe; second, E. L. Bittermans; third, J. D. Moore & Son; fourth, W. A. Buck.

IOWA SHROPSHIRE SPECIALS.

Ram Two Years Old or Over—First, Dan'l Leonard & Son on 494285; second, H. D. Eddingfield on 442284; third, Dan'l Leonard & Sons on 494287; fourth, H. D. Eddingfield on 479869; fifth, Harris M. Logan & Son on Logan's 523826.

Ram One Year Old and Under Two—First, R. C. Yohe on Yohe 267, 499902; second, R. C. Yohe on Yohe 277, 527501; third, H. D. Eddingfield on 498084; fourth, H. D. Eddingfield on 498077; fifth, J. D. Moore & Son on 527713.

Ram Under One Year—First, R. C. Yohe on Yohe 300, 527493; second, J. D. Moore & Son on Lambs 72; third, E. L. Bitterman on Bittermans 527518; fourth, J. D. Moore & Son on Lambs 76; fifth, E. L. Bittermans on Bittermans 527519.

Ewe Two Years Old or Over—First, R. C. Yohe on Yohe 254, 483330; second, R. C. Yohe on Yohe 244, 466492; third, E. L. Bittermans on East Viens 513087; fourth, E. L. Bitterman on East Viens 520443; fifth, J. D. Moore & Son on 466489.

Ewe One Year Old and Under Two—First, H. D. Eddingfield on 498072; second, H. D. Eddingfield on 498067; third, E. L. Bittermans on East Viens 498013; fourth, R. C. Yohe on Yohe 266, 499900; fifth, E. L. Bittermans on East Viens 1090, 527529.

Ewe Under One Year—First, E. L. Bittermans on Bittermans 1166, 527530; second, R. C. Yohe on Yohe 297, 527513; third, J. D. Moore & Son on Lambs 81; fourth, E. L. Bittermans on Bittermans 527527; fifth, R. C. Yohe on Yohe 299, 527515.

Champion Ram Any Age—R. C. Yohe on 499902.

Champion Ewe Any Age—R. C. Yohe on 499895.

Flock—First, H. D. Eddingfield; second, J. D. Moore & Son; third, E. L. Bittermans; fourth, Harris M. Logan & Son.

Get of Sire—First, E. L. Bittermans; second, J. D. Moore & Son; third, W. A. Buck; fourth, Harris M. Logan & Son.

SPECIAL PREMIUMS OFFERED BY AMERICAN SHROPSHIRE REGISTRY ASSOCIATION.

Ram Two Years Old or Over—First, Daniel Leonard & Son on 494285; second, H. D. Eddingfield on 479863; third, J. D. Moore & Son on Eddingfield 441122; fourth, Daniel Leonard & Son on 494287; fifth, H. D. Eddingfield on 479869.

Ram One Year Old and Under Two—First, W. A. Buck on J. F. Jones 598; second, R. C. Yohe on Yohe 267, 499902; third, R. C. Yohe on Yohe 277, 527501; fourth, H. D. Eddingfield on 498084; fifth, H. D. Eddingfield on 498077.

Ram Lamb—First, R. C. Yohe on 527494; second, R. C. Yohe on 527493; third, J. D. Moore & Son; fourth, E. L. Bitterman on 527518; fifth, J. D. Moore & Son.

Ewe One Year Old and Under Two—First, R. C. Yohe on 499895; second, H. D. Eddingfield on 498072; third, H. D. Eddingfield on 498067; fourth, E. L. Bitterman on 498013; fifth, D. W. Bruns on 527870.

Ewe Lamb—First, E. L. Bitterman on 527530; second, R. C. Yohe on 527513; third, J. D. Moore & Son on 529754; fourth, E. L. Bitterman on 527527; fifth, R. C. Yohe on 527515.

Champion Ram, Any Age—First, R. C. Yohe on Yohe 527494.

Champion Ewe, Any Age—R. C. Yohe on 499895.

Pen, Four Lambs—First, R. C. Yohe; second, E. L. Bitterman; third, J. D. Moore & Son; fourth, W. A. Buck; fifth Harris M. Logan.

Pen, Three Yearling Ewes—First, H. D. Eddingfield; second, R. C. Yohe; third, E. L. Bitterman; fourth, D. W. Bruns.

Pen Three Yearling Rams—First, R. C. Yohe; second, H. D. Eddingfield; third, Daniel Leonard & Son; fourth, E. L. Bitterman; fifth, Harris M. Logan & Son.

SPECIAL PREMIUMS BY AMERICAN SHROPSHIRE REGISTRY ASSOCIATION.

Best Show of His Own Breeding to the Breeder Never Having Exhibited at the Iowa State Fair—J. D. Moore & Son.

OXFORD DOWNS.

Ram Two Years Old or Over—First, John Graham & Son on Grahams' 92226; second, Geo. Allen & Son; third, Geo. Hauser on Grahams' 91945; fourth, Iowa State College on 74952; fifth, John Graham & Son on Grahams' 80037.

Ram One Year Old and Under Two—First, Iowa State College on 93735; second, Geo. Hauser on Rayson 93570; third, Iowa State College on 92179; fourth, C. C. Croxen on 92484; fifth, John Graham & Son on Grahams' 93562.

Ram Under One Year—First, J. G. Hanmer; second John Graham & Son on Grahams' 97932; third, C. C. Croxen on 98279; fourth, John Graham & Son on Grahams' 75934; fifth, Iowa State College.

Ewe Two Years Old or Over—First, W. R. Hauser on 91946; second, J. G. Hanmer; third, W. R. Hauser on Stonis 80247; fourth, Iowa State College on 80139; fifth, Iowa State College on 85598.

Ewe One Year Old and Under Two—First, J. G. Hanmer on 92478; second, J. G. Hanmer on 93675; third, Iowa State College on 92183; fourth, John Graham & Son on Grahams' 1408, 93032; fifth, C. C. Croxen on 92943.

Ewe Under One Year—First, Iowa State College; second, Iowa State College; third, John Graham & Sons on Grahams' 97941; fourth, W. R. Hauser on Hauser 97717; fifth, John Graham & Son on Grahams' 97939.

Champion Ram Any Age—John Graham & Son on 92226.

Champion Ewe Any Age—Geo. Hauser on Hauser's 51, 91946.

Flock—First, J. G. Hanmer; second, Iowa State College; third, W. R. Hauser; fourth, Geo. Hauser.

Get of Sire—First, Iowa State College; second, W. R. Hauser; third, John Graham & Son; fourth, C. C. Croxen.

IOWA OXFORD SPECIALS.

Ram Two Years Old or Over—First, John Graham & Son on Grahams' 800137; second, C. C. Croxen; third, F. A. Osen & Sons on Osens' 177, 92294; fourth, C. C. Croxen.

Ram One Year Old and Under Two—First, C. C. Croxen on 92484; second, John Graham & Son on Grahams' 93562; third, John Graham & Son on Grahams' 1405; fourth, C. C. Croxen.

Ram Under One Year—First, John Graham & Son on Grahams' 91932; second, John Graham & Sons on Grahams' 75934; third, Geo. Hauser on Hauser's 98101; fourth, Geo. Hauser on Hauser's 97713.

Ewe Two Years Old or Over—First, Geo. Hauser on Grahams' 91947; second, C. C. Croxen on 79780; third, C. C. Croxen on 116; fourth, John Graham & Son on Grahams' 85516.

Eye One Year Old and Under Two—First, John Graham & Son on Grahams' 92032; second, C. C. Croxen on 92943; third, C. C. Croxen on 92492; fourth, John Graham & Son on Grahams' 97931.

Ewe Under One Year—First, John Graham & Son on Grahams' 97941; second, Geo. Hauser on Hauser's 97717; third, John Graham & Son on Grahams' 97942; fourth, C. C. Croxen on 179.

Champion Ram Any Age—John Graham & Son on 800137.

Champion Ewe Any Age—Geo. Hauser on Hauser's 52.

Flock—First, John Graham & Son; second, Geo. Hauser; third, C. C. Croxen; fourth, F. A. Osen & Sons.

Get of Sire—First, Geo. Hauser; second, John Graham & Son; third, C. C. Croxen; fourth, C. C. Croxen.

SPECIAL PRIZES OFFERED BY AMERICAN OXFORD DOWN RECORD ASSOCIATION.

Best Yearling Ram—First, C. C. Croxen on 92484; second, John Graham & Son on 93562; third, John Graham & Son on 92027.

Best Yearling Ewe—First, John Graham & Son on 92032; second, C. C. Croxen on 92943; third, C. C. Croxen on 92492.

Best Pen, Four Lambs, Either Sex—First, Geo. Hauser; second, John Graham & Son; third, C. C. Croxen.

SOUTHDOWN.

Ram Two Years Old or Over—First, Iowa State College; second, W. R. Hauser on I. S. C. 36937; third, J. G. Hauser on 1662; fourth, E. L. Bittermans on Knox 36163; fifth, J. G. Hanmer on 38269.

Ram One Year Old and Under Two—First, Iowa State College on 38480; second, E. L. Bittermans on Bittermans' 38291; third, E. L. Bittermans on Bittermans' 38290; fourth, Iowa State College on 38479.

Ram Under One Year—First, Iowa State College on 818; second, Iowa State College on 776; third, W. R. Hauser on We Ewin 41; fourth, E. L. Bittermans on Bittermans' 40021.

Ewe Two Years Old or Over—First, W. R. Hauser on Hauser's 38237; second, Iowa State College on 36924; third, Geo. Hauser on Hauser's 38238; fourth, Geo. Hauser on Hauser's 38231; fifth, W. R. Hauser on I. S. C. 35403.

Ewe One Year Old and Under Two—First, Iowa State College on 38475; second, Iowa State College on 39280; third, W. R. Hauser on J. G. S. 38849; fourth, E. L. Bittermans on Bittermans' 38294.

Ewe Under One Year—First, Iowa State College on 794; second, Iowa State College on 780; third, W. R. Hauser on We Eein 39656; fourth, E. L. Bittermans on Bittermans' 40024; fifth, E. L. Bittermans on Bittermans' 40023.

Champion Ram, Any Age—Iowa State College.

Champion Ewe, Any Age—W. R. Hauser on 30.

Flock—First, Iowa State College; second, W. R. Hauser; third, E. L. Bittermans.

Get of Sire—Iowa State College.

DORSET.

Ram Two Years Old or Over—First, Ray W. Snyder on J. E. R. 10, 2112; second, Edmund Hanson on Hanson 22, 24492; third, Edmund Hanson on Hanson 37, 24504.

Ram One Year Old and Under Two—First, Edmund Hanson on Hanson 4, 24487; second, Edmund Hanson on Hanson's Best 100.

Ram Under One Year—First, Edmund Hanson on Hanson 61; second, Edmund Hanson on Hanson 72.

Ewe Two Years Old or Over—First, Edmund Hanson on Miner's 3320, 22401; second, Edmund Hanson on Gossard 11, 17944.

Ewe One Year Old and Under Two—First, Ray W. Snyder on W. E. R. 842, 2079; second, Edmund Hanson on Hanson 9, 24500; third, Edmund Hanson on Hanson 2, 24499.

Ewe Under One Year—First, Edmund Hanson on Hanson 76; second, Edmund Hanson on Hanson 62.

Champion Ram, Any Age—R. W. Snyder on 2112.

Champion Ewe, Any Age—R. W. Snyder on 2079.

Flock—First, Edmund Hanson.

Get of Sire—First, Edmund Hanson.

CHEVIOT.

Ram Two Years Old or Over—First, Maple Grove Farm on Maple Grove's 301.

Ram Under One Year—First, Maple Grove Farm on Maple Grove's 424; second, Maple Grove Farm on Maple Grove's 427.

Ewe Two Years Old or Over—First, Maple Grove Farm on Maple Grove's 303.

Ewe One Year Old and Under Two—First, Maple Grove Farm on Maple Grove's 278; second, Maple Grove Farm on Maple Grove's 272.

Ewe Under One Year—First, Maple Grove Farm on Maple Grove's 425; second, Maple Grove Farm on Maple Grove's 426.

Champion Ram, Any Age—Maple Grove Farm.

Champion Ewe, Any Age—Maple Grove Farm.

Get of Sire—First, Maple Grove Farm.

WOOL EXHIBIT.

Judge..................................**C. J. Fawcett**, Chicago

Fine Staple—First, A. J. Blakely & Son; second, O. R. Warner; third, A. J. Blakely & Son; fourth, F. F. & O. R. Warner; fifth, F. F. & O. R. Warner.

Three-eighths Blood Staple—First, Daniel Leonard & Son; second, Daniel Leonard & Son; third Merrill Satterthwaite; fourth, Merrill Satterthwaite; fifth, T. D. Rittgers.

One-fourth Blood Staple—First, Will Weible; second, Joe W. Edgar.

Braid—First, Maple Grove Farm; second, Joe W. Edgar; third, Geo. E. Husted; fourth, Maple Grove Farm; fifth, Joe W. Edgar.

SHEARING EVENTS.

Judge............................**C. N. McFarland**, Mt. Glenn, Ohio

Shearing With Power Machine by Professionals—First, J. A. Peasley, Indianola; second, Edward Uhl, Ames; third, C. H. Brown, Eldora; fourth, A. B. Anderson, Carlisle.

Shearing With Hand Shears by Professionals—First, A. B. Anderson, Carlisle; second, C. H. Brown, Eldora; third, Edward Uhl, Ames; fourth, E. C. Pyles, Marshalltown.

Shearing With Power Machines by Amateurs—First, G. E. Husted; second, Ed Hanson; third, Merrill Satterthwaite; fourth, F. A. Osen.

Shearing With Hand Shears by Amateurs—First, Elmer Frye; second, F. H. Osen.

Shearing With Power Machine by a Boy Not Over Fifteen Years Old—First, Claude Anderson, Carlisle; second, Ivyl C. Logan, Hillsboro.

Blocking and Trimming Sheep for Show Ring—First, Edward Uhl; second, Angus Moore, Mt. Pleasant; third, C. H. Brown; fourth, W. R. Hauser; fifth, E. C. Pyles, Marshalltown.

LOCAL OR COUNTY WOOL GROWERS ASSOCIATION.

Best Collection of Wool Not Less Than Ten Fleeces Shown by Any Local or County Wool Growers Association—First, Davis County, F. F. & O. R. Warner.

SHROPSHIRE.

Ewe Lamb—First, Naomi Logan; second, Ivyl Logan.

Ram Lamb—First, Ivyl Logan; second, Naomi Logan.

OXFORD.

Ewe Lamb—First, John & Roy Graham on 98336.

Ram Lamb—First, John & Roy Graham on 98335.

Champion Ewe Lamb, All Breeds—Naomi Logan.

Champion Ram Lamb, All Breeds—Ivyl Logan.

MILCH GOATS—TOGGENBURG (REGISTERED TOGGENBURG).

Exhibitors—O. H. Kale, Winterset; R. E. Lawhead, R. F. D. 4, Des Moines.

Judge................................**N. Bartholomew**, Des Moines

Doe Two Years Old or Over—First, R. E. Lawnhead on Cherry; second, R. E. Lawnhead on Bell; third, O. H. Kale on White Cliff Lena.

Doe One Year Old and Under Two—First, O. H. Kale on Winterset Girl; second, R. E. Lawhead on Opal; third, O. H. Kale on Article.

Doe Under One Year—First, R. E. Lawhead on Madge; second, R. E. Lawhead on Beauty.

SAANEN.

Doe Two Years Old or Over—First, R. E. Lawhead on Belle; second, R. E. Lawhead on Nellie.

PREMIER EXHIBITOR.

Exhibitor Winning the Greatest Number of Points—First prize to count three points; second prize, two points; third prize, one point, and one point for each goat exhibited—First, R. E. Lawhead.

POULTRY AND PET STOCK DEPARTMENT.

Judges.................... F. H. Shellabarger, West Liberty, Iowa
Joseph Dagle, Richland, Iowa
Harry Atkin, Davenport, Iowa

Exhibitors—Marshall Ashworth, Des Moines; John Bruce, Monroe; Fred Bell, Boone; Neva A. Bridie, Collins; W. H. Boyce, Des Moines; Charles Beard, Mingo; O. M. Brown, Slater; O. C. Bierma, Adelphia; R. C. Bair & Sons, Humboldt; L. C. Bolson, Decorah; Jos. F. Brenner, Mapleton; Dr. L. D. Carpenter, Indianola; Jas. W. Clark, Boone; Ralph A. Cochran, Anita; W. J. Coffin & Sons, Waverly; Gerald P. Duncan, Columbus Junction; P. Daughenbaugh, Cresco; W. H. Dunn, Altoona; Mrs. W. H. Eckles, Des Moines; F. E. Fifield, Woodbine; Ray R. Findus, Ferguson; H. T. Farrar, Ames; J. W. Frantz, Highland Park, R. F. D .4; C. H. Foster, Anamosa; Griggith Bros., Des Moines; Mrs. Harry Grimes, Chula, Mo.; Mr. and Mrs. Frank Harris, 2212 York, Des Moines; Liston L. Hall, Council Bluffs; Edmund Hanson, Dean; F. E. Heilman, Fort Dodge; Fred C. Hacke, Indianola; Weier Hart, Bondurant; Wm. Herwick, Chelsea; Mrs. Alice W. Hampton, Gibson; T. H. Hall, Des Moines; Wm. H. Hodge, 1348 Tiffin St., Des Moines; Mrs. C. D. Hunt, 4134 Second St., Highland Park Station; Wm. Harvey, Des Moines; L. E. Heifner, 2490 Terrace Road, Des Moines; O. E. Ingle, Bondurant; Henry Ingertson, Webster City; E. W. Johnson, Monroe; O. D. Joslin, Holstein; W. L. Johnson, Brooklyn; T. L. Jones, Boone; Richard M. Jones, Des Moines; D. C. Keleher, Sedalia, Mo.; A. N. Kier, Morrison, Ill.; Henry Lund, Algona; L. W. Little, Nemaha; D. Locker, 44th and Urbandale, Des Moines; Eben Luchsinger, Dubuque; C. M. Livingston, Monroe; L. L. Lyle, Webster City; Leora Leonard, Collins; O. K. McWilliams, Liberal, Mo.; Murray McMurray, Webster City; Wm. McMichael, 2434 S. E. Sixth, Des Moines; J. T. Malloy & Son, Albion; Miss Ina Marton, Indianola; F. W. Mason, Des Moines; Albert Mather, Des Moines; Walt B. Mahaffa, Waukee; Hazel & Lola Mitchell, 4054 Amick Ave., Des Moines; Mrs. S. W. Neiswanger, 2818 Dean, Des Moines; Bert O'Kean, Ankeny; W. Patterson, Carlisle; John Peterson, Randall; Waldo Pence, Marshalltown; W. G. Price, Des Moines.; Walter Perkins, Ames; Geo. S. Phillips, Des Moines; Leslie Pruter, West Side; L. N. Pulis, Des Moines; F. L. Reinhard & Son, Ottumwa; Roup & Son, Ames; W. W. Rea, Russell, 4222, Clinton; E. H. Rucker, Ottumwa; Rolandale Poultry Farm, What Cheer; Albert J. Ruess, West Liberty; Walter Russell, Indianola; Harold Schabilion, Columbus City; A. G. F. Stice, Mt. Pleasant; J. H. Stoddard, Chelsea; John J. Schwart, Box 141, Ottumwa; J. H. Todd, Villisca; Mrs. Millard Thompson, Polk; Mrs. Olen Townsend, Milton; M. Claire Tallman, Paton; G. F. Wisecup, Woodward; C. E. Wicklund, Marshalltown; Dana Wagner, care P. O., Des Moines; Mrs. V. G. Warner, Bloomfield; Wm. Walker, 2500 Ingersoll, Des Moines; Mrs. D. C. Young, 2820 Dean, Des Moines.

SWEEPSTAKES.

Best Cockerel, American Division—J. H. Todd on 188.

Best Pullet, American Division—Dana Wagner on 99.

AMERICAN.

Flock, Wyandotte—First, J. H. Todd.

Flock, Rhode Island Red—First, D. Locker.

Cock, Barred Plymouth Rock (Cockerel Bred)—First, F. L. Reinhard.

Cockerel, Barred Plymouth Rock (Cockerel Bred)—First, Mrs. A. G. F. Stice on 18; second, J. H. Stoddard on 14; third, Mrs. A. G. F. Stice on 19.

Pullet, Barred Plymouth Rock ((Cockerel Bred)—First, Mrs. A. G. F. Stice on 16; second, Mrs. A. G. F. Stice on 17; third, Wm. McMichael on 12.

Pen Fowls, Barred Plymouth Rock (Cockerel Bred)—First, Mrs. A. G. F. Stice on 11, 12, 13, 14 and 15.

Pen Chicks, Barred Plymouth Rocks (Cockerel Bred)—First, Mrs. A. G. F. Stice; second, Mrs. A. G. F. Stice; third, J. H. Stoddard.

Cockerel, Barred Plymouth Rock (Pullet Bred)—First, John Peterson on 88; second, John Peterson on 90.

Pullet, Barred Plymouth Rock (Pullet Bred)—First, John Peterson on 307; second, John Peterson on 308; third, F. L. Reinhard on 820.

Pen Chicks, Barred Plymouth Rock (Pullet Bred)—First, P. Daughenbough.

Cock, White Plymouth Rock—First, Mrs. N. C. Lusk on 36.

Cockerel, White Plymouth Rock—First, Mrs. N. C. Lusk on 44; second, Mrs. N. C. Lusk on 26.

Hen, White Plymouth Rock—First, L. E. Heifner on 17; second, L. E. Heifner on 11; third, L. E. Heifner on 15.

Pullet, White Plymouth Rock—First, Mrs. N. C. Lusk on 16; second, L. E. Heifner on 34; third, L. E. Heifner on 30.

Pen Chicks, White Plymouth Rock—First, Mrs. N. C. Lusk.

Cock, Buff Plymouth Rock—First, Mrs. Alice W. Hampton on A 89166; second, Mrs. Alice W. Hampton on 14; third, Walter Russell on 41.

Cockerel, Buff Plymouth Rock—First, Mrs. Alice W. Hampton on 13; second, Mrs. Alice W. Hampton on 24; third, Mrs. Alice W. Hampton on 23.

Hen, Buff Plymouth Rock—First, Mrs. Alice W. Hampton on 17; second, Mrs. Alice W. Hampton on 8; third, Mrs. Alice W. Hampton on 25.

Pullet, Buff Plymouth Rock—First, Mrs. Alice W. Hampton on 9; second, T. H. Hall on 13; third, Neva A. Bridie on 98.

Pen Fowls, Buff Plymouth Rock—First, Mrs. Alice W. Hampton; second, Walter Russell.

Pen Chicks, Buff Plymouth Rock—First, Mrs. Alice W. Hampton; second, T. H. Hall; third, Neva A. Bridie.

Hen, Partridge Plymouth Rock—First, Ray R. Finders on 8; second, Ray R. Finders on 42.

Pen Chicks, Partridge Plymouth Rock—First, Ray R. Finders.

Cock, Silver Wyandotte—First, Mrs. V. G. Warner on 99; second, Albert J. Ruess on 47; third, J. H. Todd on 178.

Cockerel, Silver Wyandotte—First, J. H. Todd on 188; second, Mrs. V. G. Warner on 94; third, Mrs. V. G. Warner on 66.

Hen, Silver Wyandotte—First, Mrs. V. G. Warner on 88; second, J. H. Todd on 196; third, Mrs. V. G. Warner on 86.

Pullet, Silver Wyandotte—First, J. H. Todd on 176; second, Mrs. V. G. Warner on 67; third, Albert J. Ruess on 44.

. Pen Fowls, Silver Wyandotte—First, Mrs. V. G. Warner; second, J. H. Todd.

Pen Chicks, Silver Wyandotte—First, J. H. Todd; second, Mrs. V. B. Warner; third, Albert J. Ruess.

Cock, Golden Wyandotte—First, Mrs. V. G. Warner on 88.

Cockerel, Golden Wyandotte—First, Mrs. V. G. Warner on 70.

Hen, Golden Wyandotte—First, Mrs. V. G. Warner on 93.

Pullet, Golden Wyandotte—First, Mrs. V. G. Warner on 64; second, Mrs. V. G. Warner on 71.

Cock, White Wyandotte—First, Albert Mather on 5; second, A. N. Kier on 1; third, A. N. Kier on 3.

Cockerel, White Wyandotte—First, A. N. Kier on 4; second, Virgil W. Peterson on 4; third, Virgil W. Peterson on 73.

Hen, White Wyandotte—First, Albert Mather on 7; second, L. E. Heifner on 5; third, Albert Mather on 9.

Pullet, White Wyandotte—First, A. N. Kier on 9; second, A. N. Kier on 11; third, L. E. Heifner on 36.

Pen Fowls, White Wyandotte—First, L. E. Heifner; second, A. N. Kier.

Pen Chicks, White Wyandotte—First, A. N. Kier; second, L. E. Heifner; third, Albert Mather.

Cock, Buff Wyandotte—First, F. E. Heilman on 2; second, Mrs. V. G. Warner on 97.

Hen, Buff Wyandotte—First, F. E. Heilman on 1.

Cock, Partridge Wyandotte—First, F. E. Fifield on 87.

Cockerel, Partridge Wyandotte—First, F. E. Fifield on 435; second, Henry Ingertson on 5; third, W. J. Coffin on 57.

Hen, Partridge Wyandotte—First, W. J. Coffin & Sons on 21; second, F. E. Fifield on 50; third, W. J. Coffin & Sons on 18.

Pullet, Partridge Wyandotte—First, Henry Ingertson on 13; second, Henry Ingertson on 12; third, Henry Ingertson on 10.

Cock, Silver Penciled Wyandotte—First, Mrs. V. G. Warner on 96.

Cockerel, Silver Penciled Wyandotte—First, Mrs. V. G. Warner on 63; second, Mrs. V. G. Warner on 58; third, Mrs. V. G. Warner on 62.

Hen, Silver Penciled Wyandotte—First, Mrs. V. G. Warner on 91; second, Mrs. V. G. Warner on 53.

Pullet—Silver Penciled Wyandotte—First, Mrs. V. G. Warner on 60; second, Mrs. V. G. Warner on 54; third, Mrs. V. G. Warner on 55.

Cock, Single Comb Rhode Island Red—First, Liston L. Hall on 264; second, Liston L. Hall on 260; third, F. L. Reinhard & Son on 634.

Cockerel, Single Comb Rhode Island Red—First, F. E. Heilman on 20; second, C. M. Livingston on B28054; third, C. M. Livingston on B28052.

Hen, Single Comb Rhode Island Red—First, F. L. Rinehard & Son on 619; second, Liston L. Hall on 286; third, C. M. Livingston on B04012.

Pullet, Single Comb Rhode Island Red—First, Dana Wagner on 99; second, F. E. Heilman on 21; third, W. G. Price.

Pen Fowls, Single Comb Rhode Island Red—First, D. Locker; second, F. L. Rinehard & Son.

Pen Chicks, Single Comb Rhode Island Red—First, H. E. Heilman; second, F. L. Rinehard & Son; third, C. M. Livingston.

Cock, Rose Comb Rhode Island Red—First, Dr. L. D. Carpenter on 468; second, Harold Schabilion on 17; third, T. L. Jones on 86.

Cockerel, Rose Comb Rhode Island Red—First, Dr. L. D. Carpenter on 110; second, J. T. Molloy & Son on 5; third, T. L. Jones on 10.

Hen, Rose Comb Rhode Island Red—First, Dr. L. D. Carpenter on 163; second, Dr. L. D. Carpenter on 122; third, Dr. L. D. Carpenter on 7.

Pullet—Rose Comb Rhode Island Red—First, J. T. Molloy & Son on 1; second, Liston L. Hall on 275; third, Harold Schabilion on 5.

Pen Fowls, Rose Comb Rhode Island Red—First, Dr. L. D. Carpenter; second, Harold Schabilion.

Pen Chicks, Rose Comb Rhode Island Red—First, Harold Schabilion.

ASIATIC (SWEEPSTAKES).

Best Cockerel—Weir Hart on 5.

Best Pullet—Weir Hart on 1.

Flock, Any Breed or Variety Listed in the Standard of Perfection in this Division, Fowls or Chicks—First, Weir Hart.

Cock, Light Brahma—First, Harry Lund on 45.

Cockerel, Light Brahma—First, Weir Hart on 5; second, Weir Hart on 1; third, Weir Hart on 3.

Hen, Light Brahma—First, Weir Hart on 6; second, Weir Hart on 2; third, Henry Lund on 69.

Pullet, Light Brahma—First, Weir Hart on 6; second, Weir Hart on 7; third, Weir Hart on 8.

Pen Fowls, Light Brahma—First, Weir Hart.

Pen Chicks, Light Brahma—First, Weir Hart.

Cock, Buff Cochin—First, Richard M. Jones on 106.

Hen, Buff Cochin—First, Richard M. Jones on 114; second, Richard M. Jones on 113.

Pen Fowls, Buff Cochin—First, Richard M. Jones.

Cock, Partridge Cochin—First, Chas. Beard on 11.

Cockerel, Partridge Cochin—First, Chas. Beard on 19; second, Chas. Beard on 20; third, Chas. Beard on 18.

Hen, Partridge Cochin—First, Chas. Beard on 14; second, Chas. Beard on 12; third, Chas. Beard on 13.

Pullet, Partridge Cochin—First, Chas. Beard on 15; second, Chas. Beard on 16; third, Chas. Beard on 17.

Pen Fowls, Partridge Cochin—First, Chas. Beard.

Pen Chicks, Partridge Cochin—First, Chas. Beard.

Cock, Black Langshans—First, James W. Clark on 7; second, W. Peterson on 5.

Cockerel, Black Langshans—First, Weir Hart on 8; second, Weir Hart on 10.

Hen, Black Langshans—First, James W. Clark on 19; second, James W. Clark on 13; third, C. E. Wickland on 12.

Pullet, Black Langshans—First, Weir Hart on 1; second, Weir Hart on 2.

Pen Fowls, Black Langshans—First, W. Peterson; second, W. Peterson.

Pen Chicks—Black Langshans—First, Weir Hart.

MEDITERRANEAN (SWEEPSTAKES).

Best Cockerel—First, Ralph A. Cochran on 239.

Best Pullet—First, Marshall Ashworth on 12.

Flock—First, Wm. Harvey.

Cock, Single Comb Brown Leghorn—First, F. W. Johnson on 22; second, Leslie Pruter on 1; third, F. W. Johnson on 20.

Cockerel, Single Comb Brown Leghorn—First, Leslie Pruter on 29; second, Leslie Pruter on 30; third, Leslie Pruter on 32.

Hen, Single Comb Brown Leghorn—First, Edmund Hanson on 2; second, Leslie Pruter on 27; third, Leslie Pruter on 10.

Pullet—Single Comb Brown Leghorn—First, Leslie Pruter on 33.

Cock, Rose Comb Brown Leghorn—First, C. D. Joslin on 25.

Hen, Rose Comb Brown Leghorn, C. D. Joslin on 16.

Pullet, Rose Comb Brown Leghorn—First, C. D. Joslin on 17.

Cock, Single Comb White Leghorn—First, Wm. H. Hodge on 100; second, Walt. B. Mahaffa on 97; third, Fred Bell on 4.

Cockerel, Single Comb White Leghorn—First, Ralph A. Cochran on 23-c; second, Mrs. W. H. Eckels on 50; third, Wm. Harvey on 61.

Hen, Single Comb White Leghorn—First, Ralph A. Cochran on 22-c; second, Walt. B. Mhaffa on 54; third, Wm. H. Hodge on 90.

Pullet, Single Comb White Leghorn—First, Marshall Ashworth on 12; second, Wm. Harvey on 72; third, Marshall Ashworth on 15.

Pen Chicks, Single Comb White Leghorn—First, Wm. Harvey.

Cockerel, Rose Comb White Leghorn—First, D. C. Keleher on 97; second, Frank E. Buck on 13; third, Frank E. Buck on 8.

Hen, Rose Comb White Leghorn—First, Frank E. Buck on 11; second, Frank E. Buck on 5; third, Edmund Hanson on 5.

Pullet, Rose Comb White Leghorn—First, Frank E. Buck on 10; second, Frank E. Buck on 6.

Cock, Single Comb Buff Leghorn—First, O. E. Ingle on 18; second, O. E. Ingle on 1.

Hen, Single Comb Buff Leghorn—First, O. E. Engle on 5; second, O. E. Engle on 4.

Pullet, Single Comb Buff Leghorn—First, L. W. Little on 125; second, O. E. Ingle on 7; third, O. E. Ingle on 6.

Pen Fowls, Single Comb Buff Leghorn—First, O. E. Ingle.

Cock, Single Comb Black Leghorn—First, Mrs. Harry Grimes on 27; second, Gerald P. Duncan on 7.

Cockerel, Single Comb Black Leghorn—First, Mrs. Harry Grimes on 38; second, Gerald P. Duncan on 76; third, Mrs. Harry Grimes on 48.

Pullet, Single Comb Black Leghorn—First, Mrs. Harry Grimes on 84; second, Gerald P. Duncan on 78; third, Mrs. Harry Grimes on 8.

Cock, Single Comb Black Minorca—First. Murray McMurray on 11.

Cockerel, Single Comb Black Minorca—First, T. L. Jones on 2; second, T. L. Jones on 20.

Hen, Single Comb Black Minorca—First, Murray McMurray on 50; second, Edmund Hanson on 8.

Pullet, Single Comb Black Minorca—First, Leona Leonard on 6; second, Leona Leonard on 7; third, T. L. Jones on 21.

Pen Fowls—Single Comb Black Minorca—First, Leona Leonard.

Pen Chicks, Single Comb Black Minorca—First, Murray McMurray.

Hen, Rose Comb Black Minorca—First, T. L. Reinhard & Son on 277.

Cock, Rose Comb White Minorca—First, J. N. Trummell on 20.

Cockerel, Single Comb White Minorca—First, Fred C. Hacke on 21; second, Fred C. Hacke on 22.

Pullet, Single Comb White Minorca—First, Fred C. Hacke on 24; second, Fred C. Hacke on 23.

Pullet, Rose Comb White Minorca—First, J. N. Trummell on 21; second, J. N. Trummell on 22.

Cockerel, White Faced Black Spanish—First, Mrs. W. H. Eckels on 76.

Hen, White Faced Black Spanish—First, Mrs. W. H. Eckels on 121.

Cockerel, Blue Andalusian—First, C. H. Foster on 6.

Pullet, Blue Andalusian—First, C. H. Foster on 3; second, C. H. Foster on 4.

Cockerel, Mottled Ancona—First, John J. Schwartz on 74.

Pullet, Mottled Ancona—First, John J. Schwartz on 92; second, John J. Schwartz on 97.

Pen Chicks, Mottled Ancona—First, John J. Schwartz.

Hen, Campines (Silver)—First, F. L. Reinhard & Son on 282; second, F. L. Reinhard on 271.

SWEEPSTAKES.

Best Cockerel, English Division—L. C. Bolson on 21.

Best Pullet, English Division—H. T. Farrar on 64.

ENGLISH.

Hen, Silver Gray Dorking—First, Edmund Hanson on 9; second, Edmund Hanson on 10.

Cock, Single Comb Buff Orpington—First, O. M. Brown on 48; second, O. M. Brown on 50; third, Wm. Herink on 0895.

Cockerel, Single Comb Buff Orpington—First, H. T. Farrar on 33; second, H. T. Farrar on 53; third, H. T. Farrar on 63.

Hen, Single Comb Buff Orpington—First, O. M. Brown on 39; second, H. T. Farrar on 1; third, O. M. Brown on 29.

Pullet, Single Comb Buff Orpington—First, H. T. Farrar on 64; second, H. T. Farrar on 22; third, Roup & Son on 13.

Pen Fowls, Single Comb Buff Orpington—First, R. C. Bair & Son; second, Roup & Son; third, Wm. Herink.

Pen Chicks, Single Comb Buff Orpington—First, R. C. Bair & Son; second, Wm. Herink.

Cockerel, Single Comb White Orpington—First, L. C. Bolson on 21; second, L. C. Bolson on 23; third, W. H. Dunn on 98.

Hen, Single Comb White Orpington—First, W. H. Dunn on 95; second, Griffith Bros. on 4.

Pullet, Single Comb White Orpington—First, L. C. Bolson; second, L. C. Bolson on 25; third, Griffith Bros. on 3.

Pen Chicks, Single Comb White Orpington—First, L. C. Bolson; second, W. H. Dunn; third, Jos. F. Brenner.

Cock, Dark Cornish—First, Dr. B. M. Smith on 5.

Cockerel, Dark Cornish—First, Ray R. Finders on 204; second, Dr. B. M. Smith on 12.

Hen, Dark Cornish—First, Ray R. Finders on 49; second, Dr. B. M. Smith on 6.

Pullet, Dark Cornish—First, Dr. B. M. Smith on 13.

Pen Chicks, Dark Cornish—First, Dr. B. M. Smith.

Hen, White Cornish—First, Edmund Hanson on 12.

FRENCH.

Cock, Mottled Houdans—First, Richard M. Jones on 117.

Hen, Mottled Houdans—First, Richard M. Jones on 151.

GAMES AND GAME BANTAMS.

Cock, Black Breasted Red Game—First, Richard M. Jones on 172.

Hen, Black Breasted Red Game—First, Richard M. Jones on 192.

ORNAMENTAL GAMES AND BANTAMS.

Cock, Golden Seabright—First, F. L. Reinhard & Son; second, F. L. Reinhard & Son.

Cockerel, Golden Seabright—First, Dr. B. M. Smith on 3.

Hen, Golden Seabright—First, F. L. Reinhard & Son on 1194; second, Dr. B. M. Smith on 2.

Pullet, Golden Seabright—First, F. L. Reinhard & Son on 1199; second, Dr. B. M. Smith on 4.

Cock, Silver Seabright—First, F. L. Reinhard & Son on 1151.

Hen, Silver Seabright—First, F. L. Reinhard & Son on 1115; second, F. L. Reinhard & Son on 1116.

Cock, Black Rose Comb—First, Mr. and Mrs. Frank Harris on 7; second, Mr. and Mrs. Frank Harris on 2.

Cockerel, Black Rose Comb—First, Mr. and Mrs. Frank Harris on 35; second, F. W. Mason on 5.

Hen, Black Rose Comb—First, Mr. and Mrs. Frank Harris on 6; second, Mr. and Mrs. Frank Harris on 29.

Pullet, Black Rose Comb—First, F. W. Mason on 11; second, Mr. and Mrs. Frank Harris on 37.

Cock, Buff Cochin—First, Waldo Pence on 13; second, O. K. McWilliams on 50.

Cockerel, Buff Cochin—First, O. K. McWilliams on 46; second, Waldo Pence on 12.

Hen, Buff Cochin—First, Waldo Pence on 45; second, Waldo Pence on 5.

Pullet, Buff Cochin—First, Walso Pence on 16; second, Waldo Pence on 15.

Cock, Partridge Cochin—First, Waldo Pence on 25; second, Waldo Pence on 24.

Hen, Partridge Cochin—Second, F. L. Reinhard on 1186.

Hen, White Cochin—First, Bert O'Kean on 324.

Cock, Black Cochin—First, Gerald P. Duncan on 13.

Hen, Black Cochin—First, Gerald P. Duncan on 35.

Cock, White Japanese—First, F. L. Reinhard & Son on 1182.

MISCELLANEOUS.

Cock, White Silkies—First, Waldo Pence on 28.

Hen, White Silkies—First, Waldo Pence on 24; second, Waldo Pence on 25.

CAPONS.

Any Variety Capons—First, Henry Lund on 71.

PIGEONS.

Pair Homing Pigeons—First, F. L. Reinhard.

Pair Swallow Pigeons—First, F. L. Reinhard; second, F. L. Reinhard.

Pair Tumbler Pigeons—First, F. L. Reinhard & Son; second, F. L. Reinhard & Son.

Pair Turbet Pigeons—First, F. L. Reinhard & Son; second, F. L. Reinhard & Son.

TURKEYS.

Cock, Bronze—First, O. C. Bierma on 44.

Cock, White Holland—First, Mrs. Willard Thompson on 1.

Cockerel, White Holland—First, Mrs. Willard Thompson on 2.

Hen, White Holland—First, Mrs. Willard Thompson on 3.

Pullet, White Holland—First, Mrs. Willard Thompson on 4.

DUCKS.

Old Drake, White Pekin—First, Mrs. V. G. Warner; second, John Brice on 2; third, Harry Thompson on 1.

Young Drake, White Pekin—First, Mrs. V. G. Warner.

Old Duck, White Pekin—First, Mrs. V. G. Warner; second, Harry Thompson on 5; third, Mrs. Olen Townsend on 4.

Young Duck, White Pekin—First, Mrs. V. G. Warner.

Young Drake, Colored Rouen—First, F. L. Reinhard & Son.

Old Duck, Colored Rouen—First, F. L. Reinhard & Son.

Young Duck, Colored Rouen—First, F. L. Reinhard & Son; second, F. L. Reinhard & Son.

Young Drake, Black Cayuga—First, Edmund Hanson; second, Edmund Hanson.

Old Drake, Gray Call—First, F. L. Reinhard & Son on 1177.

Young Drake, Gray Call—First, F. L. Reinhard & Son on 519.

Old Duck, Gray Call—F. L. Reinhard & Son on 1189.

Young Duck, Gray Call—First, F. L. Reinhard & Son on 1193.

Old Duck, White Call—First, Edmund Hanson; second, Edmund Hanson.

Old Drake,, Black East India—First, Gerald P. Duncan on 26.

Young Drake, Black East India—First, Gerald P. Duncan on 30; second, Gerald P. Duncan on 29.

Old Duck, Black East India—First, Gerald P. Duncan on 28; second, Gerald P. Duncan on 27.

Young Duck, Black East India—First, Gerald P. Duncan on 31; second, Edmund Hanson.

Young Duck, White Crested—First, Gerald P. Duncan on 90.

Old Drake, Colored Muscovy—First, Gerald P. Duncan on 11; second, F. L. Reinhard & Son on 569; third, F. L. Reinhard & Son on 568.

Young Drake, Colored Muscovy—First, F. L. Reinhard & Son on 534.

Old Drake, Colored Muscovy—First, F. L. Reinhard & Son on 78; second, F. L. Reinhard & Son on 93; third, Gerald P. Duncan on 10.

Young Duck, Colored Muscovy—First, F. L. Reinhard & Son on 273.

Old Drake, White Muscovy—First, F. L. Reinhard & Son on 5.

Young Drake, White Muscovy—First, F. L. Reinhard & Son.

Old Duck, White Muscovy—First, F. L. Reinhard & Son on 95.

Young Drake, Buff Orpington—First, Gerald P. Duncan on 50; second, Gerald P. Duncan on 46.

Young Duck, Buff Orpington—First, Gerald P. Duncan on 48; second, Gerald P. Duncan on 47.

Old Drake, Fawn and White Indian Runner—First, F. L. Reinhard & Son on 294; second, F. L. Reinhard & Son on 358; third, Mrs. C. D. Hunt on 4.

Young Drake—Fawn and White Indian Runner—First, F. L. Reinhard & Son on 268.

Old Duck, Fawn and White Indian Runner—First, Mrs. C. D. Hunt on 2; second, F. L. Reinhard & Son on 157; third, Mrs. C. D. Hunt on 3.

Young Duck—Fawn and White Indian Runner—First, F. L. Reinhard & Son on 287; second, F. L. Reinhard & Son on 293.

Old Drake, White Indian Runner—First, F. W. Johnson on 17.

Old Duck, White Indian Runner—First, Edmund Hanson on 19.

Old Drake, Blue Swedish—First, F. L. Reinhard & Son on 290.

Young Drake, Blue Swedish—First, F. L. Reinhard & Son on 311; second, F. L. Reinhard & Son on 285.

Old Duck, Blue Swedish—First, F. L. Reinhard & Son on 253.

Young Duck, Blue Swedish—First, F. L. Reinhard & Son on 462; second, Gerald P. Duncan on 81.

GEESE.

Old Gander, Gray Toulouse—First, F. L. Reinhard & Son; second, John Brice on 87; third, Griffith Bros. on 7.

Young Gander, Gray Toulouse—First, John Brice on 84; second, Griffith Bros. on 8; third, Mrs. D. C. Young on 6.

Old Goose, Gray Toulouse—First, Mrs. F. L. Reinhard & Son; second, John Brice on 66; third, Miss Ina Morton on 452.

Young Goose—Gray Toulouse—First, John Brice on 85; second, Mrs. D. C. Young on 7; third, Miss Ina Morton on 456.

Old Gander, White Embden—First, F. L. Reinhard & Son; second, F. L. Reinhard & Son; third, O. C. Bierma on 31.

Young Gander, White Embden—First, O. C. Bierma on 37; second, Neva A. Bridie on 12.

Old Goose, White Embden—First, F. L. Reinhard; second, F. L. Reinhard; third, O. C. Bierma on 36.

Young Goose, White Embden—First, O. C. Bierma on 45.

Old Gander, Gray African—First, F. L. Reinhard.

Old Goose, Gray African—First, F. L. Reinhard & Son; second, F. L. Reinhard & Son.

Old Goose, Brown Chinese—First, F. L. Reinhard & Son.

Old Gander, White Chinese—First, F. L. Reinhard & Son; second, Edmund Hanson on 22; third, Edmund Hanson on 21.

Young Gander, White Chinese—First, Edmund Hanson on 23; second, F. L. Reinhard & Son.

Old Goose, White Chinese—First, F. L. Reinhard & Son; second, Edmund Hanson on 25; third, Edmund Hanson on 24.

Young Goose, White Chinese—First, Edmund Hanson on 27.

JUNIOR POULTRY EXHIBITORS.

Horace Adams, Burlington; Paul B. Alpin, Ames; Verdene Anthony, Ames; Donald Acheson, Ames; Everet Anderson, Boxholm; Kleta Amos, Ottumwa; Frank Buchanan, Ottumwa; Kenneth Bloomer, Burlington; Lenore Bohlen, Danville; Ada Bohlen, Danville; James K. Burns, Ames; Glendora Barber, Keokuk; Marguerite Burris, Sioux City; Cammon Bender, Sioux City; Walter Blake, Sioux City; Otto Broesanile, Sioux City; Howard Berg, Marshalltown; Binford Buck, Marshalltown; Robert Berg, Marshalltown; Pauline Black, Ottumwa; Roger Breckenridge, Ottumwa; Walt Bohlman, Ottumwa; Luverne Barnard, Marshalltown; Lucile Barnard, Marshalltown; Charles Bartlett, Marshalltown; Hugh Bennett, Marshalltown; Fayette Bascom, Milford; John Bascom, Milford; Charlotte Brett, Spirit Lake; Neva Bellinger, New Hampton; Wells Calbreth, Keokuk; Creighton Cunningham, Sioux City; Marjorie Cunningham, Ames; Matthew Chesire, Marshalltown, Zelma Crozier, Knoxville; Dorothy Clem, Marshalltown; Wilma Case, Marshalltown; Isla Clifton, Sutherland; Pauline Dunlavey, Oakville; Donald Dunlavey, Oakville; Arthur Dalil, Sioux City; Kermit P. Donnely, Ottumwa; Richard and Cora Davis, Ottumwa; George F. Dunmitt, Ottumwa; Wayne Dare, Spirit Lake; Milton Eslinger, Ottumwa; Elder Edmund, Ottumwa; Beulah Elifrits, Spirit Lake; Margaret Fannin, Keokuk; Daniel Findlay, Ottumwa; Louise Findlay, Ottumwa; Pauline Fitzimmons, Ottumwa; Roger Funk, Ottumwa; Doris Fanton, Marshalltown; Dale Fleming, Spirit Lake; Nathan Ginsberg, Sioux City; Clifford Grove, Sioux City; John L. Gilis, Ottumwa; William

Garland, Marshalltown; May Guthrie, Milford; Clarence Gott, New Hampton; Inez Hutchinson, Keokuk; Veta Hutchinson, Keokuk; Oliver Hawkins, Sioux City; Wayne Hoyt, Sioux City; Verna Hoyt, Sioux City; Leslie Hohn, Sioux City; Esthel Hansen, Spirit Lake; Marjorie Hanrihan, Ottumwa; John Hanson, Milford; Carl Honeyman, New Hampton; Charles Hey, Marshalltown; Leo C. Jacobson, Marshalltown; Henrietta Koestner, Burlington; Frank Kiebick, Burlington; Dorothy Kuhn, Ames; Beatrice Kiefer, Keokuk; Theodore Kreutz, Sioux City; Vorus Kidd, Spirit Lake; Wilson B. Lenaberger, Burlington; Max Lanbersheimer, Keokuk; Ruth Lamb, Marshalltown; Floyd Leek, Spirit Lake; Howard Matthews, Danville; Ida Matthews, Danville; Alice Morris, Sioux City; Clarence Marrison, Ames; Cora Martin, Bussey; Aaron Melick, Ottumwa; Ernest Mungoven, Ottumwa; Neal Moehl, Marshalltown; Clyde Mann, Sutherland; Frances Lillian McNamara, Ottumwa; Clarence McDavitt, Ottumwa; Helen Newhard, Ames; Elizabeth Nelson, Keokuk; Linus Niemeyer, Ottumwa; Lois Neifort, Bussey; Walter Overson, Sioux City; Bernard Olson, Sioux City; Leslie Peters, Keokuk; Herman Pfeil, Sioux City; Frances Redfern, Yarmouth; Kenneth Redfern, Yarmouth; Mary Reid, Ames; Hiram Roe, Ames; Theodore Rupley, Keokuk; Edward Rupley, Keokuk; Clara Anna Reid, Sioux City; Helen Reid, Sioux City; Raymond Rail, Ames; Esther Rush, Ottumwa; Bertha Rusch, Ottumwa; Max Rensch, Marshalltown; Wendell Russell, New Hampton; Verna Schuelhize, Middletown; Helen Shumway, Sioux City; Inez Seeman, Sioux City; Maxine Schmidt, Sioux City; Lilburn Staman, Sioux City; Cecil Severe, Sioux City; Marion Stankey, Sioux City; Harold Storm, Sioux City; Clarence Stalman, Ames; Mildred Shoffer, Marshalltown; John Sieg, Marshalltown; Thomas Stenovaag, Marshalltown; Marrow Sweeney, Sutherland; Harold Shaw, Ottumwa; Cecil Scott, Ottumwa; Herman Swanson, Ottumwa; Hollister Smith, Spirit Lake; Hazel Tarpy, West Side; Charles Tompkins, Spirit Lake; Bernice Terry, Sutherland Edward Unruh, Sioux City; Harold Utley, New Hampton; Byron Van Scoy, Ames; Ralph Vance, Ottumwa; Clarence Wiele, Burlington; Myrtle Wrigley, Keokuk; Lillian Winkler, Sioux City; Wm. Winkler, Sioux City; Thomas Wheeler, Sioux City; Edwin Wearth, Ames; Charles Wilson, Milford; Ethel Wilson, Knoxville; James West, Ottumwa; Ross Wiegand, Ottumwa; William Wilson, Marshalltown; Clifford Wilson, Marshalltown; Ruth Wilson, Marshalltown; Margaret Willey, Spirit Lake.

SWEEPSTAKES.

Best Cockerel, American Section—Buff Wyandotte Cockerel (117), Ross Wiegand, Ottumwa.

Best Pullet, American Section—White Plymouth Rock Pullet, Frank Buchanan, Ottumwa.

BARRED PLYMOUTH ROCK.

Barred Plymouth Rock Cockerel—First, Max Laubersheimer on 49; second, Bruce Rasmussen on 745; third, Frances L. McNamara on 22.

Barred Plymouth Rock Pullet—First, Max Laubersheimer on 25; second, Max Laubersheimer on 40; third, Byron Vanscoy on 63.

Barred Plymouth Rock Pen—First, Clarence Morrison on (16-23-57); second, Cora Martin on (90-91-92); third, Harold Utley on (128-150-155).

White Plymouth Rock Cockerel—First, Frank Buchanan on 290; second, John Hanson on 8; third, Cammon Bender on 69.

White Plymouth Rock Pullet—First, Frank Buchanan; second, Herman Pfeil on 36; third, John Hanson on 9.

White Plymouth Rock Pen—First, Henrietta Koestner on 767-770-775; second, Ada Bohlen on 530-544-546; third, Frank Buchanan.

Other Variety Plymouth Rock Cockerel—First, Kermit Donnelly on 100; second, Cecil Scott on 49; third, Pauline Dunlavy on 832.

Other Variety Plymouth Rock Pullet—First, Kermit Donnelly on 101; second, Cecil Scott on 50; third, Pauline Dunlavy on 845.

Other Variety Plymouth Rock Pen—First, Kermit Donnelly on 102-103-104; second, Pauline Dunlavy on 839-837-829; third, Veta Hutchinson on 93-51-98.

White Wyandotte Cockerel—First, Floyd Luk on 32; second, Elizabeth Neslon on 9; third, Luverne Barnard on 26.

White Wyandotte Pullet—First, Helen Newhard on 4; second, Floyd Leek on 35; third, Elizabeth Nelson on 68.

White Wyandotte Pen—First, Elizabeth Nelson on 10-11-1; second, Walter Blake on 28-29-30; third, Floyd Leek on 33-36-37.

Buff Wyandotte Cockerel—First, Ross Wiegand on 117; second, Clara A. Reid on 5.

Buff Wyandotte Pullet—First, Clara A. Reid on 6; second, Ross Wiegand on 118.

Buff Wyandotte Pen—First, Ross Wiegand on 119-120-121.

Silver Laced Wyandotte Cockerel—First, Inez Seeman on 2; second, Edward Rupley on 7.

Silver Laced Wyandotte Pullet—First, Edward Rupley on 58; second, Inez Seeman on 1; third, Frances Redfern on 815.

Silver Laced Wyandotte Pen—First, Theodore Rupley on 71-64-80; second, Inez Seeman on 3-4-5.

Golden Laced Wyandotte Cockerel—First, Clifford Grove on 43.

Golden Laced Wyandotte Pullet—First, Clifford Grove on 44.

Golden Laced Wyandotte Pen—First, Clifford Grove on 45-46-47.

Rhode Island Red, Single or Rose Comb Cockerel—First, Jamie K. Burns on 8; second, Kenneth Bloomer on 758; third, Hiram Roe on 75.

Rhode Island Red, Single or Rose Comb Pullet—First, Edward G. Unruh on 100; second, Jamie K. Burns on 1; third, Kenneth Bloomer on 766.

Rhode Island Red, Single or Rose Comb Pen—First, Wendell Russell on 191-226-251; second, Jamie K. Burns on 10-11-12; third, Aaron Melick on 92-93-94.

Langshan, Any Variety Cockerel—First, Arthur Dalil on 48; second, Dorothy Kuhn on 9; third, Neal Moehl on 28.

Langshan, Any Variety Pullet—First, Arthur Dalil on 49; second, Dorothy Kuhn on 46; third, Neal Moehel on 29.

Langshan, Any Variety, Pen—First, Neal Moehel on 23-24-25; second. Dorothy Kuhn on 15-67-4.

SWEEPSTAKES.

Best Cockerel, Mediterranean—Helen Newhard on 146.

Best Pullet, Mediterranean—Helen Newhard on 604.

Brown Leghorn, Any Variety Cockerel—First, Bernard Olson on 68.

Brown Leghorn, Any Variety Pullet—First, Bernard Olson on 54.

White Leghorn, Single or Rose Comb Cockerel—First, Hazel Tarpy on 3; second, Chas. Wilson on 56; third, Marion Stankey on 31.

White Leghorn, Single or Rose Comb Pullet—First, Hazel Tarpy on 4; second, Marion Stankey on 32; third, Chas. Wilson on 57.

White Leghorn, Single or Rose Comb Pen—First, Hazel Tarpy on 14-15-16; second, Marion Stankey on 33-34-35; third, Albert Ranhans on 828-848-847.

Buff Leghorn, Any Variety, Cockerel—First, Wilson B. Lemberger.

Buff Leghorn, Any Variety Pullet—First, Wilson B. Lemberger.

Buff Leghorn, Any Variety, Pen—First, Wilson B. Lemberger; second Theodore Kentz on 30-31-32.

Black Minorca, Single or Rose Comb Cockerel—First, Helen Newhard on 146; second, Donald Dunlavy on 841; third, Edwin Wearth on 3.

Black Minorca, Single or Rose Comb Pullet—First, Helen Newhard on 28; second, Donald Dunlavy on 835; third, Edwin Wearth on 14.

Black Minorca, Single or Rose Comb, Pen—First, Helen Reid on 9-10-11; second, Howard Berg on 3-4-5; third, Robert Berg on 1-7-12.

Blue Andalusian, Cockerel—First, Martha E. Peppers on 122.

Blue Andalusian, Pullet—First, Martha E. Peppers on 123.

Blue Andalusian, Pen—First, Martha E. Peppers on 124-125-126.

Mottled Ancona, Single or Rose Comb Cockerel—First, Donald Acheson on 40; second, Cecil Severe on 55; third, Bertha Ruseh on 12.

Mottled Ancona, Single or Rose Comb Pullet—First, Donald Acheson on 22; second, Cecil Severe on 53; third, Bertha Rusch on 13.

Mottled Ancona, Single or Rose Comb Pen—First, Kenneth Perley on 65-66-100; second, Bertha Rusch on 14-15-16; third, Ruth Wilson on 4-5-6.

Campine, Any Variety, Cockerel—First, Richard & Cora Davis on 67.

Campine, Any Variety, Pullet—First, Richard & Cora Davis on 68.

Campine, Any Variety, Pen—First, Richard & Cora Davis on 69-70-71.

ENGLISH SECTION (SWEEPSTAKES)

Best Cockerel—Mary Reid, Ames.

Best Pullet—Alice Morris, Sioux City.

Buff Orpington, Cockerel—First, Mary Reid on 62; second, Alice Morris on 5; third, Verna Schuethize on 726.

Buff Orpington, Pullet—First, Alice Morris on 4; second, Mary Reid on 73; third, Verna Schuelhize on 790.

Buff Orpington, Pen—First, Alice Morris on 1-2-3; second, Mary Reid on 84-89-92; third, Paul B. Aplin on 9-69-70.

Other Variety Orpington, Cockerel—First, Lilburn Staman on 21; second, Richard & Cora Davis on 72; third, Arthur Dalil on 50.

Other Variety Orpington, Pullet—First, Richard & Cora Davis on 73; second, Lilburn Staman on 22; third, Arthur Dalil on 51.

Other Variety Orpington, Pen—First, Richard & Cora Davis on 74-75-76; second, Lilburn Staman on 23-24-25.

Cornish, Any Variety, Cockerel—First, Raymond Rail on 20.

Cornish, Any Variety, Pullet—First, Raymond Rail on 21.

Cornish, Any Variety, Pen—First, Raymond Rail on 25-26-27.

Grand Sweepstakes, Best Cockerel, All Breeds—Ross Wiegand on 117.

Grand Sweepstakes, Best Pullet, All Breeds—Helen Newhard on 28.

RABBIT DEPARTMENT.

EXHIBITORS—Adel Flemish Giant Rabbitry, Adel; Robert S. Andrews, Melbourne; J. M. Allen, 1557 25th St., Des Moines; Dr. T. P. Bond, 711 Hippee Bldg., Des Moines; Bergstrom & Lundgren, 413 S. E. 5th St., Des Moines; W. C. Brown, Des Moines; C. J. Cummins, 1435 E. Grand Ave., Des Moines; E. A. Dugstad, Taopi, Minn.; G. R. Dickman, 1509 Harrison Ave., Des Moines; Russell C. Fraser, 2122 Cottage Grove Ave., Des Moines; Holland Bros., Mystic; Ralph Heathcote, 713 E. 15th St., Des Moines; Walter Holland, 804 25th St., Des Moines; Fred C. Hock, Indianola; Mrs. Geo. Jolley, Fort Des Moines; G. I. Jones, Des Moines; H. C. Kempton, 1222 Pleasant, Des Moines; F. E. Lutter, Des Moines; Mohawk No. 3 Red Rabbitry, 3319 S. W. 9th St., Des Moines; Geo. P. Monahan, 1165 10th St., Des Moines; F. W. Mason, Des Moines; J. R. Manning, Waukee; M. L. Seeley, 628 40th St., Des Moines; Stone City Rabbitry, Joliet, Ill.; J. J. Starbeck, Valley Junction; Wm. J. Scott & Son, Des Moines; R. O. Turnbull, Haverhill; Mrs. A. Wilson, Harlan; Iva H. Wilson, Des Moines.

JUDGE................................C. S. GIBSON, Detroit, Mich.

AMERICAN BLUES

Senior Buck, Five Entries—First, G. I. Jones; second, (34277); third, (20-3), C. J. Cummins.

Senior Doe, Six Entries—First, (919); second, third, fourth, G. I. Jones; fifth, (34415), C. J. Cummins.

Junior Doe, Two Entries—First, (A-2); second, (A-1), C. J. Cummins.

AMERICAN CHECKERED GIANT.

Senior Doe, Three Entries—First, (3-B); second, (1-B); third, (2-B), Backstrom & Lundgren.

Junior Buck, Six Entries—First, (5-B); second, (12-B); third, (10-B); fourth, (6-B); Backstrom & Lundgren.

Junior Doe, Five Entries—First, (13-B); second, (7-B); third, (4-B); fourth, (11-B), Backstrom & Lundgren.

ANGORAS.

Senior Buck, One Entry—First, (46231), O. B. Hinman.

Senior Doe, Two Entries—First, (46233); second, (10), O. B. Hinman.

BELGIAN HARES.

Senior Buck, Six Entries—First, (5), E. A. Dugstad; second, (A-11-H), W. C. Brown; third, J. M. Allen; fourth, J. R. Manning.

Senior Doe, Three Entries—First, (B-2-H), W. C. Brown; second, (1-L), Backstrom & Lundgren; third (2), J. M. Allen.

Junior Buck, Six Entries—First, (PM4B); second, (PM2B); third, (PM3B); fourth, (C1H); fifth, (A14H), W. C. Brown.

Junior Doe, Seven Entries—First, (PM1B), W. C. Brown; second, (4L); third, (5L), Backstrom & Lundgren; fourth, (MM4B); fifth, (MM3B), W. C. Brown.

DUTCH-BLACK.

Senior Buck, One Entry—First, (K22), R. O. Turnbull.

DUTCH-BLUE.

Junior Doe, One Entry—First, (T-1), R. O. Turnbull.

BLACK FLEMISH GIANT.

Senior Buck, One Entry—First, (LM2), O. B. Hinman.

Junior Buck, Three Entries—First, (SC55); second, (SC56), Stone City Rabbitry.

Junior Doe, Four Entries—First (SC75); second, (SC71), Stone City Rabbitry.

DARK STEEL GRAY—FLEMISH GIANT.

Senior Buck, One Entry—First, (21148), O. B. Hinman.

Senior Doe, Eight Entries—First, (46221), O. B. Hinman; second, (10868), Mrs. Geo. Jolley; third, (46253); fourth, (34241), O. B. Hinman; fifth, (3), Mrs. Geo. Jolley.

Junior Buck, Two Entries—First, second, J. R. Manning.

Junior Doe, Six Entries—First, (L-4), Russell C. Fraser; second, (LM-6), O. B. Hinman; third, (A-1); fourth, (A-2); fifth, (A-3), J. M. Allen.

GRAY-FLEMISH GIANT.

Senior Doe, Eight Entries—First, G. I. Jones; second, (21), Dr. Thos. P. Bond; third, (46228), Ralph Heathcote; fourth, J. R. Manning.

Junior Buck, Nine Entries—First, (B-2), J. M. Allen; second, (SC12), Stone City Rabbitry; third, J. R. Manning.

Junior Doe, Eight Entries—First, (SC25), Stone City Rabbitry; second, J. R. Manning; third, (17), Dr. Thos. P. Bond.

WHITE FLEMISH GIANT.

Senior Doe, One Entry—First (T-7), R. O. Turnbull.

HIMALAYANS.

Junior Buck, Five Entries—First, (2-T); second, (1-T); third, (3-T); fourth, (5-T); fifth, (4-T), Backstrom & Lundgren.

Junior Doe, Five Entries—First, (7-T); second, (6-T); third, (9-T); fourth, (10-T); fifth, (8-T), Backstrom & Lundgren.

NEW ZEALAND REDS.

Senior Buck, Eighteen Entries—First, Walter Holland; second, (G-2), F. W. Mason; third, (10588), F. E. Lutter; fourth, (4646), H. C. Kempton; fifth, (C7C4), Wm. J. Scott & Son.

Senior Doe, Twenty Entries—First, (1), Geo. P. Monahan; second, (F-6); third, (F-5), F. W. Mason; fourth, (2), Geo. P. Monahan; fifth, (W-4), Mrs. A. Wilson.

Junior Buck, Twenty-five Entries—First, (Y2S), Wm. J. Scott & Son; second, (C-7), J. M. Allen; third, (Z2S); fourth, (Z1S), Wm. J. Scott & Son; fifth, (H-4), Holland Bros.

Junior Doe, Thirty-two Entries—First, (W34), Mrs. A. Wilson; second (1A), F. W. Mason; third, (A4S), Wm. J. Scott & Son; fourth, (C-10), J. M. Allen; fifth (E2S), Wm. J. Scott & Son.

AGRICULTURAL DEPARTMENT.

Superintendent............................H. O. Weaver, Wapello
Judge....................................P. C. Taff, Ames

FIELD CORN.

Northern District.

Ten Ears, Yellow—First, H. U. Arthur, Spirit Lake; second, Isaac Johnson, West Union; third, H. F. Babcock, Sanborn; fourth, W. N. Wayne, Nashua; fifth, Fritzof Tinderholt, Ossian.

Ten Ears, White—First, Forest Christensen, Ringsted; second, A. B. Schenck, Algona; third, R. W. Butterfield, Irvington; fourth, E. R. Mawdsley, Irvington; fifth, R. B. Brown, Inwood; sixth, Frank Harker, Milford.

Single Ear, Yellow—First, H. U. Arthur, Spirit Lake; second, Fritzof Tinderhold, Ossian; third, Isaac Johnson, West Union; fourth, E. R. Mawdsley, Irvingotn; fifth, H. F. Babcock, Sanborn.

Single Ear, White—First, Forest Christensen, Ringsted; second, R. B. Brown, Inwood; third, A. B. Schenck, Algona; fourth, Isaac Johnson, West Union; fifth, Fritzof Tinderhold, Ossian.

NORTH CENTRAL DISTRICT.

Ten Ears, Yellow—First, Emanuel L. Peterson, Harcourt; second, C. R. McClean, Osage; third, J. Albert Anderson, Harcourt; fourth, H. E. Brown, Salix; fifth, J. R. Silver, Webster City; sixth, Victor E. Gustafson, Harcourt; seventh, E. A. Thompson, Storm Lake; eighth, Jas. Jenson & Sons, Newell.

Ten Ears, White—First, Emanuel L. Peterson, Harcourt; second, J. W. Eral, Fort Dodge; third, Joe Kramer, Elkader; fourth, P. M. Peterson, Cherokee; fifth, Henry George, West Union; sixth, Uriah Mayo, Sac City.

Single Ear, Yellow—First, J. R. Silver, Webster City; second, E. A. Thompson, Storm Lake; third, Victor E. Gustafson, Harcourt; fourth, Jas. Jenson & Sons, Newell; fifth, Joe Kramer, Elkader; sixth, Fred G. Pinn, Humboldt.

Single Ear, White—First, J. W. Eral, Fort Dodge; second, Joe Kramer, Elkader; third, Emanuel L. Peterson, Harcourt; fourth, Victor E. Gustafson, Harcourt; fifth, P. M. Peterson, Cherokee; sixth, Henry George, West Union.

SOUTH CENTRAL DISTRICT.

Ten Ears, Yellow—First, Will Steinwyk, Mitchellville; second, Marion Coppock, Ankeny; third, E. F. Gaecke, State Center; fourth, John Justice, Ankeny; fifth, C. E. Hiatt, Mitchellville; sixth, G. C. Sieberling, Mitchellville; seventh, Mrs. Ellis F. Randolph, Ankeny; eighth, J. E. Proudfit, Altoona; ninth, Frank B. Goecke, State Center; tenth, Roy E. Proudfit, Adelphi.

Ten Ears, White—First, John Justice, Ankeny; second, W. O. Knapp, Guthrie Center; third, Erle Knapp, Guthrie Center; fourth, Carl Holden, Williamsburg; fifth, Perry Livinggood, Castana; sixth, W. F. Otchek, Grinnell; seventh, Wm. Danner, Dallas Center; eighth, Paul Kern, Dallas Center.

Single Ear, Yellow—First, E. L. Pearson, Mitchellville; second, Harry N. Webster, Runnells; third, Alva Freel, Runnells; fourth, Marion Coppock, Ankeny; fifth, G. C. Sieberling, Mitchellville; sixth, C. W. Fawcett, Mt. Vernon; seventh, Will Steinwyk, Mitchellville; eighth, Mrs. Carl Head, Danville; ninth, John Justice, Ankeny; tenth, C. E. Hiatt, Mitchellville.

Single Ear, White—First, W. F. Otchek, Grinnell; second, John Justice, Ankeny; third, W. O. Knapp, Guthrie Center; fourth, Carl Holden, Williamsburg; fifth, Wm. Danner, Dallas Center; sixth, Erle Knapp, Guthrie Center; seventh, Perry Livinggood, Castana; eighth, Paul Kern, Dallas Center.

SOUTHERN DISTRICT.

Ten Ears, Yellow—First, Krizer Bros., Eddyville; second, Ray Redfern, Yarmouth; third, Mack Utterback, Sigourney; fourth, S. Fleming, Stuart; fifth, N. H. Krizer, Rose Hill; sixth, J. A. Mason, Carlise; seventh, W. E. Utterback, Sigourney; eighth, H. F. Hanna, Lacey; ninth, E. F. Hanna, Lacey; tenth, Ellsworth Bailey, Ottumwa.

Ten Ears, White—First, Mack Utterback, Sigourney; second, D. W. Bruns, Sigourney; third, Amos Bailey, Ottumwa; fourth, N. H. Krizer, Rose Hill; fifth, Krizer Bros., Eddyville; sixth, Mintle Bros., Glenwood; seventh, Walter Russell, Indianola; eighth, Ludwig Benson, Essex; ninth, Ellsworth Bailey, Ottumwa; tenth, C. D. Rime, Floris.

Single Ear, Yellow—First, Ellsworth Bailey, Ottumwa; second, Ray Redfern, Yarmouth; third, J. A. Mason, Carlisle; fourth, S. Fleming, Stuart; fifth, Ray Farley, Carlisle; sixth, E. F. Hanna, Lacey; seventh, Amos Bailey, Ottumwa; eighth, W. A. Middleswart, Indianola; ninth, W. E. Utterback, Sigourney; tenth, N. H. Krizer, Rose Hill.

Single Ear, White—First, D. W. Bruns, Sigourney; second, Mintle Bros., Glenwood; third, Ludwig Benson, Essex; fourth, Mack Utterback, Sigourney; fifth, Carl W. Head, Danville; sixth, N. H. Krizer, Rose Hill; seventh, Krizer Bros., Eddyville; eighth, Walter Russell, Indianola.

Northern and North Central Districts

Ten Ears, Other than Yellow or White—First, Emanuel L. Peterson, Harcourt; second, P. M. Peterson, Cherokee; third, Henry George, West Union.

Single Ear, Other than Yellow or White—First, W. F. Lyon, Pleasantville; second, P. M. Peterson, Cherokee; third, Emanuel L. Peterson, Harcourt; fourth, Henry George, West Union; fifth, J. W. Eral, Fort Dodge.

South Central and Southern Districts.

Ten Ears, Other than Yellow or White—First, Earl Zeller, Jefferson; second, Guy Hummer, Iowa City; third, P. M. Parsons, Carlisle; fourth, G. W. Coon, Hartford; fifth, Guy Coon, Hartford.

Single Ear, Other than Yellow or White—First, Earl Zeller, Jefferson; second, Guy Hummer, Iowa City; third, Guy Coon, Hartford; fourth, W. F. Otchek, Grinnell; fifth, Carl W. Head, Danville.

Sweepstakes.

Ten Ears, Yellow. Competition limited to first prize winner in preceding districts—Will Steinwyk, Mitchellville.

Ten Ears, White—Mack Utterback, Sigourney.

Ten Ears, Other than Yellow or White—Earl Zeller, Jefferson.

Single Ear, Yellow—E. L. Pearson, Mitchellville.

Single Ear, White—D. W. Bruns, Sigourney.

Single Ear, Other than Yellow or White—Earl Zeller, Jefferson.

Grand Sweepstakes.

Ten Ears, Any Variety—Will Steinwyk, Mitchellville.

Single Ear, Any Variety—E. L. Pearson, Mitchellville.

SWEET CORN AND POP CORN.

Ten Ears Small Early Sweet Corn—First, J. E. Cornwell, Ankeny; second, C. E. Malone, Atlantic; third, E. R. Mawdsley, Irvington; fourth, H. P. Cornwell, Ankeny; fifth, J. H. Comer, Des Moines; sixth, Perry Livinggood, Castana.

Ten Ears Late Sweet Corn—First, W. F. Otchek, Grinnell; second, E. L. Reed, Ames; third, C. E. Malone, Atlantic; fourth, J. H. Comer, Des Moines; fifth, Mrs. T. J. Flora, Des Moines.

Ten Ears Evergreen Roasting Ears for Table Use, in Husks—First, Chas. M. Pink, Des Moines; second, C. C. McGrew, Des Moines; third, Margaret Cornwell, Ankeny.

Ten Ears Country Gentleman Roasting Ears for Table Use, in Husks—First, Henry O. DeRoss, Des Moines; second, A. L. Plummer, Adelphi.

Ten Ears White Rice Pop Corn—First, W. F. Otchek, Grinnell; second, Ray Redfern, Yarmouth; third, E. R. Mawdsley, Irvington; fourth, J. H. Comer, Des Moines; fifth, M. J. Craig, Mitchellville.

Ten Ears Any Other Variety Pop Corn—First, W. F. Otchek, Grinnell; second, W. F. Lyon, Pleasantville; third, J. C. Eggert, Newton; fourth, J. W. Freel, Pleasantville; fifth, J. A. McPherrin, Indianola.

GRAINS AND SEEDS.

Winter Wheat—First, A. W. Hitchcock, Altoona; second, Paul Peters, Ankeny; third, Matt Baker, Mitchellville; fourth, John Justice, Ankeny; fifth, A. W. Taylor, Pleasantville; sixth, D. G. Reynolds, Altoona.

Spring Wheat—First, John Frush, Pleasantville; second, Glenn D. Caster, Belle Plaine; third, John Justice, Ankeny; fourth, J. W. Freel, Pleasantville; fifth, John C. Miller, Belle Plaine; sixth, Frank Justice, Berwick.

Small Early Oats—First E. L. Pearson, Mitchellville; second, W. F. Otchek, Grinnell; third, Geo. H. Koch, Brighton; fourth, Ray Redfern, Yarmouth; fifth, H. U. Arthur, Spirit Lake; sixth, J. F. Seiberling, Mitchellville.

Swedish Type Oats—First, W. F. Otchek, Grinnell; second, F. J. Sexauer, Ankeny; third, J. R. Silver, Webster City; fourth, Emanuel L. Peterson, Harcourt; fifth, J. A. Mason, Carlisle; sixth, Merrill Satterthwaite, Muscatine.

Silver Mine Type Oats—First, W. F. Otchek, Grinnell; second, Paul Peters, Ankeny; third, J. F. McKee & Sons, Carlisle; fourth, Ray Redfern, Yarmouth; fifth, Matt Baker, Mitchellville; sixth, J. F. Wasson, Panora.

Large Colored Oats—First, W. F. Otchek, Grinnell; second, J. F. Wasson, Panora; third, Wm. Wolf, Grimes; fourth, H. M. Drennan, Waukee.

Rye—First, J. W. Freel, Pleasantville; second, W. F. Lyon, Pleasantville; third, L. W. Gibbons, Carlisle; fourth, J. F. Wasson, Panora; fifth, Clarence Goldsberry, Runnells.

Barley—First, W. F. Otchek, Grinnell; second, Forrest H. Ford, Tipton; third, J. W. Freel, Pleasantville; fourth, J. F. Wasson, Panora; fifth, P. B. Pilmer, Des Moines.

Speltz—First, W. L. Willey, Menlo; second, J. F. Wasson, Panora; third, J. E. Cornwell, Ankeny.

Timothy Seed—First, Ray Redfern, Yarmouth; second, Carl Holden, Williamsburg; third, W. F. Otchek, Grinnell; fourth, C. E. Malone, Atlantic; fifth, J. E. Cornwell, Ankeny.

Red Clover Seed—First, Carl Holden, Williamsburg; second, Frank Justice, Berwick; third, Ray Redfern, Yarmouth; fourth, Matt Baker, Mitchellville; fifth, W. L. Pearson, Mitchellville.

Millet Seed—First, W. F. Otchek, Grinnell; second, M. F. Sims, Ames; third, J. F. Wasson, Panora; fourth, C. E. Malone, Atlantic.

Flax Seed—First, C. E. Malone, Atlantic.

GRASS AND FORAGE.

Timothy Sheaf (Hay)—First, J. A. Mason, Carlisle; second, F. E. Black, Ackworth; third, W. F. Otchek, Grinnell; Fourth, J. F. Wasson, Panora; fifth, W. L. Willey, Menlo.

Red Top Sheaf (Hay)—First, W. F. Otchek, Grinnell; second, John Frush, Pleasantville; third, F. E. Black, Ackworth; fourth, C. E. Malone, Atlantic; fifth, W. L. Willey, Menlo.

Medium Red Clover Sheaf (Hay)—First, Ray Redfern, Yarmouth; second, Raymond Hethershaw, Des Moines; third, W. L. Willey, Menlo; fourth, Norman Hethershaw, Des Moines; fifth, J. F. Wasson, Panora.

Mammoth Red Clover Sheaf (Hay)—First, Raymond Hethershaw, Des Moines; second, J. A. Mason, Carlisle; third, Norman Hethershaw, Des Moines; fourth, C. E. Malone, Atlantic; fifth, Reinhard & Beall, Ottumwa.

Alsike Clover Sheaf (Hay)—First, F. L. Reinhard & Son, Ottumwa; second, W. L. Willey, Menlo; third, Norman Hethershaw, Des Moines; fourth, Raymond Hethershaw, Des Moines; fifth, J. E. Cornwell, Ankeny.

Alfalfa Clover Sheaf (Hay)—First, J. E. Cornwell, Ankeny; second, W. F. Wasson, Panora; third, Frank Kalmus, Danville; fourth, Raymond Hethershaw, Des Moines; fifth, W. F. Otchek, Grinnell.

Millet Sheaf (Hay)—First, W. F. Wasson, Panora; second, W. L. Willey, Menlo; third, Reinhard & Beall, Ottumwa; fourth, F. L. Reinhard & Son, Ottumwa; fifth, H. A. Justice, Ankeny.

Blue Grass Sheaf (Hay)—First, W. F. Otchek, Grinnell; second, C. E. Malone, Atlantic; third, W. F. Wasson, Panora; fourth, Frank Kalmus, Danville; fifth, J. A. Mason, Carlisle.

Sudan Grass Sheaf (Hay)—First, H. A. Justice, Ankeny; second, W. F. Wasson, Panora; third, J. E. Cornwell, Ankeny; fourth, H. P. Cornwell, Ankeny.

SHEAF GRAIN.

Wheat in Straw (Spring)—First, F. L. Reinhard & Son, Ottumwa; second, J. A. Mason, Carlisle; third, Raymond Hethershaw, Des Moines.

Wheat in Straw (Winter)—First, F. L. Reinhard & Son, Ottumwa; second, Raymond Hethershaw, Des Moines; third, H. A. Justice, Ankeny; fourth, Norman Hethershaw, Des Moines; fifth, B. Freel, Pleasantville.

Barley in Straw—First, C. E. Malone, Atlantic; second, W. F. Wasson, Panora; third, F. L. Reinhard & Son, Ottumwa; fourth, J. E. Cornwell, Ankeny.

Oats in Straw (Early)—First, Frank Kalmus, Danville; second, W. F. Otchek, Grinnell; third, C. E. Malone, Atlantic; fourth, Carl Holden, Williamsburg; fifth, W. F. Wasson, Panora.

Oats in Straw (Late)—First, Frank Kalmus, Danville; second, W. F. Otchek, Grinnell; third, L. C. Carr, Carlisle; fourth, C. E. Malone, Atlantic; fifth, Alva Freel, Runnells.

Rye in Straw—First, W. F. Wasson, Panora; second, J. A. Mason, Carlisle; third, J. W. Freel, Pleasantville; fourth, Raymond Hethershaw, Des Moines; fifth, F. L. Reinhard & Son, Ottumwa.

Flax for Seed (May Be One Year Old)—First, W. F. Wasson, Panora; second, W. F. Otchek, Grinnell; third, E. M. Wilson, Panora; fourth, C. E. Malone, Atlantic.

Ripe Millet for Seed—First, W. F. Wasson, Panora; second, J. W. Freel, Pleasantville; third, W. F. Lyon, Pleasantville; fourth, F. L. Reinhard & Son, Ottumwa; fifth, E. M. Wilson, Panora.

Speltz—First, W. F. Wasson, Panora; second, C. E. Malone, Atlantic.

Timothy Sheaf (for Seed)—First, Reinhard & Beall, Ottumwa; second, F. L. Reinhard & Son, Ottumwa; third, W. F. Otchek, Grinnell; fourth, F. E. Blake, Ackworth; fifth, Raymond Hethershaw, Des Moines.

Blue Grass Sheaf (Seed)—First, Frank Kalmus, Danville; second, F. L. Reinhard & Son, Ottumwa; third, W. F. Wasson, Panora; fourth, E. M. Wilson, Panora; fifth, C. E. Malone, Atlantic.

Sudan Grass Sheaf (Seed)—First, W. F. Wasson, Panora; second, H. P. Cornwell, Ankeny; third, J. E. Cornwell, Ankeny; fourth, C. E. Malone, Atlantic.

POTATOES.

Early Varieties. Early Ohio—First, George L. Batthis, Grimes; second, C. E. Malone, Atlantic; third, W. F. Otchek, Grinnell; fourth, J. R. Griffieon, Mitchellville; fifth, F. L. Overly, Indianola; sixth, E. A. Thompson, Storm Lake; seventh, M. N. Chambers, Malvern.

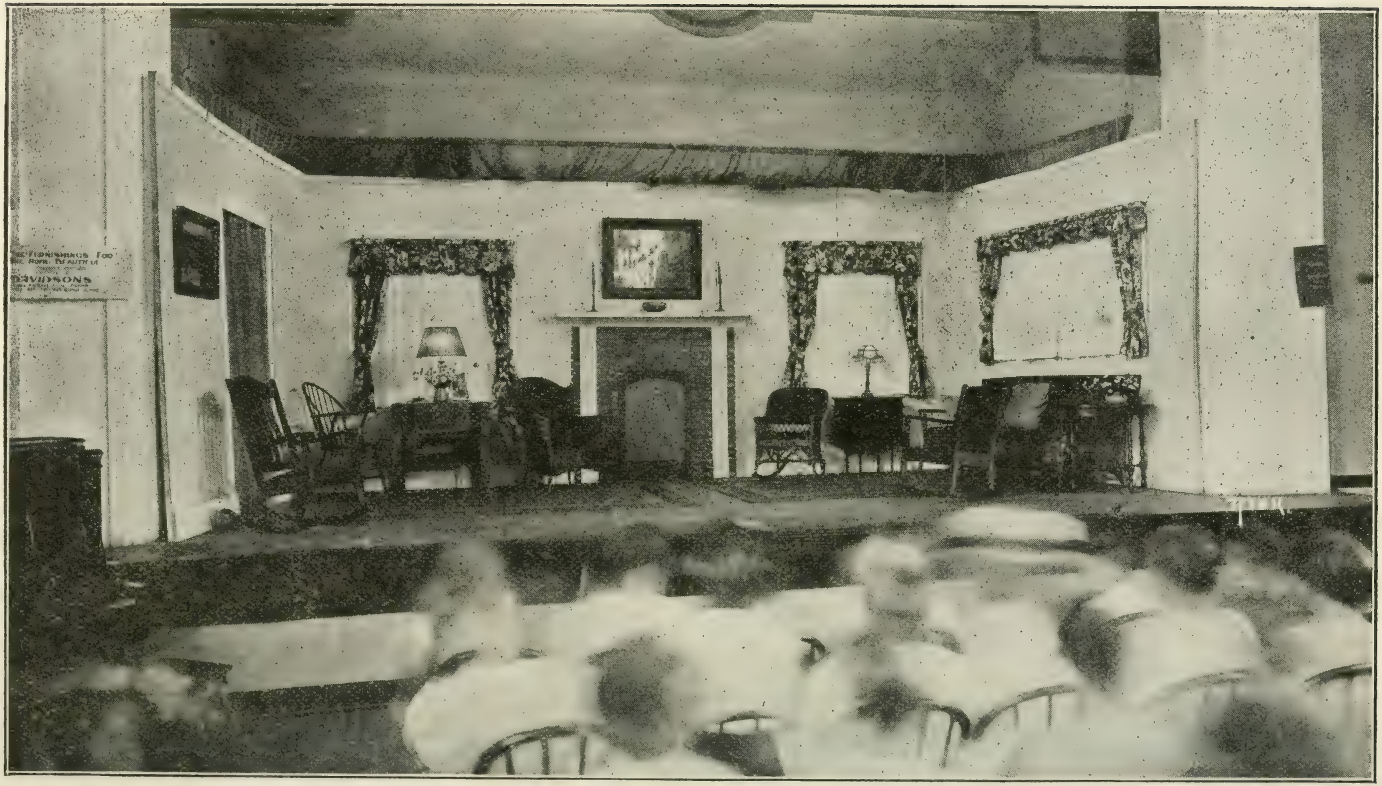
Bliss Triumph—First, W. F. Otchek, Grinnell; second, E. L. Reed, Ames; third, L. D. Whinery, Des Moines; fourth, F. L. Overly, Indianola; fifth, Kenneth Burnett, Ames; sixth, Chas. M. Pink, Des Moines; seventh, W. E. Utterback, Sigourney.

Beauty of Hebron—First, Sestier Bros., Des Moines; second, Chas. M. Pink, Des Moines.

Sweepstakes, Early Varieties—George L. Batthis, Grimes.

Mid-Season. Irish Cobbler—First, E. L. Reed, Ames; second, Sestier Bros., Des Moines; third, W. E. Utterback, Sigourney; fourth, Clarenz Holehan, Des Moines; fifth, Paul Kern, Dallas Center; sixth, Kenneth Burnett, Ames; seventh, John Frush, Pleasantville.

Maggie Murphy—First, W. E. Utterback, Sigourney; second, Jas. Hethershaw, Des Moines; third, Sestier Bros., Des Moines; fourth, E. L. Reed, Ames; fifth, Chas. M. Pink, Des Moines.


FURNISHINGS FOR
HOME BEAUTIFUL
DAVIDSONS

HOME BEAUTIFUL DEMONSTRATION, WOMAN'S BUILDING.

Blue Victor—First, Sestier Bros., Des Moines; second, J. F. Wasson, Panora; third, Chas. M. Pink, Des Moines; fourth, W. E. Utterback, Sigourney; fifth, Jas. Hethershaw, Des Moines.

Sweepstakes, Mid-Season Varieties—E. L. Reed, Ames.

Late Bonanza—First, Jas. Hethershaw, Des Moines; second, Chas. M. Pink, Des Moines; third, Clarenz Holehan, Des Moines; fourth, W. E. Utterback, Sigourney; fifth, Sestier Bros., Des Moines.

Rural New Yorker—First, F. L. Overly, Indianola; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines; fourth, Sestier Bros., Des Moines.

Seneca Beauty—First, W. E. Utterback, Sigourney; second, Jas. Hethershaw, Des Moines; third, E. L. Reed, Ames; fourth, Sestier Bros., Des Moines; fifth, Chas. M. Pink, Des Moines.

Sweepstakes—Late Varieties—F. L. Overly, Indianola.

Miscellaneous—Collection to consist of at least ten varieties—First, Chas. M. Pink, Des Moines; second, Jas. Hethershaw, Des Moines; third, W. E. Utterback, Sigourney; fourth, Sestier Bros., Des Moines.

Any Meritorious Variety Not Listed Above, Limited to Ten Varieties—First, J. Hethershaw; A. L. Plummer; Chas. M. Pink; W. E. Utterback; Chas. M. Pink; Chas. M. Pink; Chas. M. Pink; E. L Reed; second, A. L. Plummer; J. Heathershaw; Sestier Bros.; E. L. Reed.

Sweepstakes in Miscellaneous Varieties—Chas M. Pink, Des Moines.

Grand Sweepstakes Competition Limited to Sweepstakes Winners in Four Divisions—George L. Batthis, Grimes.

SWEET POTATOES.

Red Jersey—First, Sestier Bros., Des Moines; second, J. M. Henderson, Des Moines.

Yellow Jersey—First, Jas. Hethershaw, Des Moines; second, Sestier Bros., Des Moines.

White Sweet Potato—First, Jas. Hethershaw, Des Moines; second, J. M. Henderson, Des Moines; third, Sestier Bros., Des Moines.

Any Meritorious Variety, Not Listed Above, Limited to Three Varieties—First, J. M. Henderson, Des Moines; Chas. M. Pink, Des Moines; Jas. Hethershaw, Des Moines; second, Jas. Hethershaw; Sestier Bros., Des Moines.

FIELD OR STOCK VEGETABLES.

Beets, White Half Sugar (Three Specimens)—First, A. L. Plummer, Adelphi; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines.

Beets, Mangel-wurzels (Three Specimens)—First, Jas. Hethershaw, Des Moines; second, Chas. M. Pink, Des Moines; third, A. L. Plummer, Adelphi.

Beets, Golden Tankard (Three Specimens)—First, A. L. Plummer, Adelphi; second, J. R. Griffeon, Mitchellville; third, Mrs. Dr. E. A. Bare, Pleasantville.

White Carrots for Stock (Six Specimens)—First, A. L. Plummer, Adelphi; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines.

Pumpkins, Ripe Field (Two Specimens)—First, Sestier Bros., Des Moines; second, H. A. Justice, Ankeny; third, A. L. Plummer, Adelphi.

Rutabagas, for Stock, Any Variety (Six Specimens)—First, Sestier Bros., Des Moines; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines.

Squash, for Stock (Two Specimens)—First, R. T. Packer, Adelphi; second, C. W. Packer, Altoona; third, Sestier Bros., Des Moines.

Turnips, for Stock (Six Specimens)—First, A. L. Plummer, Adelphi; second, C. W. Phelps, Des Moines; third, Sestier Bros., Des Moines.

Largest Specimen of Field or Stock Vegetables, Not Deformed. Largest Pumpkin—First, C. W. Phelps, Des Moines; second, H. A. Justice, Ankeny; third, A. L. Plummer, Adelphi.

Largest Squash—First, C. W. Packer, Altoona; second, Sestier Bros., Des Moines; third, Jas. Hethershaw, Des Moines.

Largest White Carrot—First, A. L. Plummer, Adelphi; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines.

Largest Beet (Mangel-wurzel)—First, Jas. Hethershaw, Des Moines; second, A. L. Plummer, Adelphi; third, M. J. Craig, Mitchellville.

Largest Turnip—First, C. W. Phelps, Des Moines; second, Cyrus E. Harvey, Altoona; third, R. C. Carr, Carlisle.

Largest Rutabaga—First, Sestier Bros., Des Moines; second, Chas. M. Pink, Des Moines; third, Jas. Hethershaw, Des Moines.

VEGETABLE ROOT CROP.

Red Globe Onions (One Dozen)—First, Jno. Frush, Pleasantville; second, Sestier Bros., Des Moines; third, J. U. Walker, Swan.

White Globe Onions (One Dozen)—First, Sestier Bros., Des Moines; second, Chas. M. Pink, Des Moines; third, Mrs. Ella Plummer, Des Moines.

Yellow Globe Onions (One Dozen)—First, John Frush, Pleasantville; second, Edna Blake, Ackworth; third, A. L. Plummer, Adelphi.

Twelve Largest Onions, Any Variety—First, John Frush, Pleasantville; second, Edna Blake, Ackworth; third, J. U. Walker, Swan.

Best One Dozen Onions Not Named Above—First, Chas. M. Pink, Des Moines; second, J. R. Griffieon, Mitchellville; third, John Frush, Pleasantville.

Turnips, One-half Dozen—First, Sestier Bros., Des Moines; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines.

Rutabaga, Turnips, One-half Dozen, Yellow Flesh—First, Jas. Hethershaw, Des Moines; second, Sestier Bros., Des Moines; third, Chas. M. Pink, Des Moines.

Parsnips, One-half Dozen—First, A. L. Plummer, Adelphi; second, Sestier Bros., Des Moines; third, Jas. Heathershaw, Des Moines.

Carrots for Table Use, One-half Dozen—First, Jas. Hethershaw, Des Moines; second, M. F. Sims, Ames; third, Wm. Danner, Dallas Center.

Commercial Sugar Beets—First, Sestier Bros., Des Moines; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines.

Beets, for Table Use, One-fourth Dozen—First, S. D. Whinery, Des Moines; second, Sestier Bros., Des Moines; third, C. W. Phelps, Des Moines.

Vegetable Oysters, One-half Dozen—First, Sestier Bros., Des Moines; second, F. L. Overly, Indianola; third, O. F. Porter, Ankeny.

TABLE VEGETABLES.

One Quart Shelled Ground Cherries—First, M. J. Craig, Mitchellville; second, R. R. Smith, Carlisle; third, E. Heydon, Mitchellville.

Beans, Pole Lima, Shelled (One Quart)—First, Chas. M. Pink, Des Moines; second, Cyrus E. Harvey, Altoona; third, M. J. Craig, Mitchellville.

Beans, Henderson's Bush Lima, Shelled (One Quart)—First, J. M. Henderson, Des Moines; second, Cyrus E. Harvey, Altoona; third, A. L. Plummer, Adelphi.

Beans, White Navy Shelled (One Quart)—First, Ella Plummer, Des Moines; second, Mrs. Eliza Henderson, Des Moines; third, J. R. Griffieon, Mitchellville.

Cabbage, Early Jersey Wakefield (Three Heads)—First, Jas. Hethershaw, Des Moines; second, Chas. M. Pink, Des Moines; third, Sestier Bros., Des Moines.

Cabbage, Late Flat (Three Heads)—First, M. J. Craig, Mitchellville; second, Sestier Bros., Des Moines; third, Jas. Hethershaw, Des Moines.

Cabbage, Red (Three Heads)—First, Sestier Bros., Des Moines; second, Jas. Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines.

Cabbage, Savoy (Three Heads)—First, Sestier Bros., Des Moines; second, Mrs. J. W. Freel, Pleasantville; third, Jas. Hethershaw, Des Moines.

Cabbage, Three Heaviest Heads—First, Sestier Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, Jas. Heathershaw, Des Moines.

Cabbage, Round, Any Variety (Three Heads)—First, Cyrus E. Harvey, Altoona; second, Sestier Bros., Des Moines; third, Jas. Hethershaw, Des Moines.

Cauliflower (Three Heads)—First, Jas. Hethershaw, Des Moines; second, Chas. M. Pink, Des Moines; third, Cyrus E. Harvey, Altoona.

Cucumbers, Ripe (Three Specimens)—First, Sestier Bros., Des Moines; second, Harry O. DeRoss, Des Moines; third, C. W. Phelps, Des Moines.

Cucumbers, for Slicing (Six Specimens)—First, M. J. Craig, Mitchellville; second, Cyrus E. Harvey, Altoona; third, Jas. Hethershaw, Des Moines.

Celery, Red, Roots Attached (Six Stalks)—First, Sestier Bros., Des Moines.

Celery, White, Roots Attached (Six Stalks)—First, Sestier Bros., Des Moines; second, Murray McMurray, Webster City.

Egg Plants (Three Specimens)—First, Sestier Bros., Des Moines; second, C. W. Phelps, Des Moines; third, Cyrus E. Harvey, Altoona.

Kohl Rabi (Three Heads)—First, Clarenz Holehan, Des Moines; second, Jas. Hethershaw, Des Moines.

Muskmelons, Green Fleshed (Three Specimens)—First, A. L. Plummer, Adelphi; second, J. U. Walker, Swan; third, Sestier Bros., Des Moines.

Muskmelons, Salmon Fleshed (Three Specimens)—First, Sestier Bros., Des Moines; second, W. A. Pickering, Des Moines; third, M. J. Craig, Mitchellville.

Peppers, Green Mango (Twelve Specimens)—First, C. W. Phelps, Des Moines; second, Sestier Bros., Des Moines; third, Jas. Hethershaw, Des Moines.

Peppers, Red Mango (Twelve Specimens)—First, Cyrus E. Harvey, Altoona; second, F. L. Overly, Indianola; third, Sestier Bros., Des Moines.

Peppers, Red (Twelve Specimens)—First, Jas. Hethershaw, Des Moines; second, Cyrus E. Harvey, Altoona; third, Sestier Bros., Des Moines.

Peppers, Red Cayenne (Twelve Specimens)—First, Chas. M. Pink, Des Moines; second, C. W. Phelps, Des Moines; third, Jas. Hethershaw, Des Moines.

Pumpkin, Ripe Sweet (Two Specimens)—First, Floe Clark, Carlisle; second, Jas. Hethershaw, Des Moines; third, A. L. Plummer, Adelphi.

Rhubarb, for Table Use (Six Stalks)—First, A. W. Johnson, Des Moines; second, Sestier Bros., Des Moines; third, Jas. Hethershaw, Des Moines.

Squash, Banana (Two Specimens)—First, Sestier Bros., Des Moines; second, F. E. Blake, Ackworth; third, John Frush, Pleasantville.

Squash, Boston Marrow (Two Specimens)—First, Sestier Bros., Des Moines; second, Jas. Hethershaw, Des Moines; third, J. W. Freel, Pleasantville.

Squash, Crook Neck (Two Specimens)—First, W. E. Utterback, Sigourney; second, H. A. Justice, Ankeny; third, Sestier Bros., Des Moines.

Squash, Delicious (Two Specimens)—First, J. W. Freel, Pleasantville; second, W. E. Utterback, Sigourney; third, Sestier Bros., Des Moines.

Squash Essex Hybrid—First, Sestier Bros., Des Moines; second, Jas. Hethershaw, Des Moines; third, J. U. Walker, Swan.

Squash, Hubbard (Two Specimens)—First, Jas. Hethershaw, Des Moines; second, W. E. Utterback, Sigourney; third, J. W. Freel; Pleasantville.

Squash, Marblehead (Two Specimens)—First, Sestier Bros., Des Moines; second, Jas. Hethershaw, Des Moines; third, J. F. McKee & Son, Carlisle.

Table, Queen or Danish (Two Specimens—First, Cyrus E. Harvey, Altoona; second, Chas. M. Pink, Des Moines; third, C. W. Phelps, Des Moines.

Squash, Sibley (Two Specimens)—First, J. F. McKee & Sons, Carlisle; second, F. E. Blake, Ackworth; third, Alva Freel, Runnells.

Tomatoes, Red (Twelve Specimens)—First, Cyrus E. Harvey, Altoona; second, Walter J. Knodle, Greenfield; third, Sestier Bros., Des Moines.

Tomatoes, Purple (Twelve Specimens)—First, Mrs. Ella Plummer, Des Moines; second, Sestier Bros., Des Moines; third, Jas. Hethershaw, Des Moines.

Tomatoes, Yellow (Twelve Specimens)—First, Sestier Bros., Des Moines; second, Cyrus E. Harvey, Altoona; third, F. L. Overly, Indianola.

Tomatoes, Largest Any Variety (Twelve Specimens)—First, Chas. M. Pink, Des Moines; second, R. R. Smith, Carlisle; third, C. W. Phelps, Des Moines.

Watermelons (Two Specimens)—First, J. R. Griffieon, Mitchellville; second, Fred Wischmeire, Wapello; third, Chas. M. Pink, Des Moines.

DISPLAYS.

Display of Onions to Consist of Not Less Than Five Varieties of Five Specimens Each—First, John Frush, Pleasantville; second, Jas. Hethershaw, Des Moines; third, A. L. Plummer, Adelphi; fourth, Sestier Bros., Des Moines.

Display of Tomatoes to Consist of Five Varieties of Five Specimens Each —First, James Hethershaw, Des Moines; second, Chas. M. Pink, Des Moines; third, Cyrus E. Harvey, Altoona; fourth, Sestier Bros., Des Moines.

Display of Peppers, to Consist of Not Less Than Five Varieties of Five Specimens Each—First, James Hethershaw, Des Moines; second, Sestier Bros., Des Moines; third, J. U. Walker, Swan.

VEGETABLE SWEEPSTAKES.

Sweepstakes—First, Sestier Bros., Des Moines; second, James Hethershaw, Des Moines; third, Chas. M. Pink, Des Moines; fourth, A. L. Plummer, Adelphi.

INDIVIDUAL FARM EXHIBIT.

Individual Farm Exhibit from South Central District, Pro Rata on Points Above Minimum—First, E. M. Wilson, Panora; second, J. T. Wasson, Panora.

Individual Farm Exhibit from Southern District, Pro Rata on Points Above Minimum—First, J. W. Freel, Pleasantville; second, J. A. Mason, Carlisle; third, F. L. Reinhard & Son, Ottumwa; fourth, Carl W. Head, Danville; fifth, C. E. Malone, Atlantic; sixth, W. F. Lyon, Pleasantville; seventh, J. U. Walker, Swan.

Individual Farm Exhibit from Polk County, Pro Rata on Points Above Minimum—First, John Justice, Ankeny; second, C. O. Garrett, Des Moines; third, A. L. Plummer, Adelphi; fourth, J. E. Cornwell, Ankeny.

Sweepstakes for the Highest Scoring Individual Farm Exhibit—First, J. W. Freel, Pleasantville; second, J. A. Mason, Carlisle; third, F. L. Reinhard & Son, Ottumwa; fourth, Carl W. Head, Danville.

County Exhibit from Northern District, Pro Rata on Points Above Minimum—First, Winneshiek County; second, Winnebago County; third, Chickasaw County.

County Exhibit from North Central District, Pro Rata on Points Above Minimum—First, Grundy County; second, Webster County.

County Exhibit from South Central District, Pro Rata on Points Above Minimum—First, Polk County; second, Guthrie County; third, Greene County; fourth, Carroll County; fifth, Audubon County; sixth, Monona County.

County Exhibit from Southern District, Pro Rata on Points Above Minimum—First, Clarke County; second, Cass County; third, Warren County; fourth, Decatur County; fifth, Marion County; sixth, Monroe County.

Sweepstakes for the Highest Scoring County Exhibit—First, Polk County; second, Guthrie County; third, Grundy County; fourth, Clarke County.

In order to encourage care in arrangement and decorating exhibits five special premiums are offered for the most attractive, best decorated and best arranged exhibit. First—Polk County; second, Cass County; third, Clarke County; fourth, Grundy County; fifth, Guthrie County.

BOYS' AND GIRLS' CLUB DEPARTMENT.

JUDGE.................................R. S. HERRICK, Des Moines

Ten Ears White Corn—First, Bernard White, Mable, Minn.; second, John F. Sherts, Dickinson County; third, County Agent, Le Mars; fourth, Leland Anderson, Hesper; fifth, Darrell Whitaker, Fairfield.

Ten Ears Yellow Corn—First, Bertha Bailey, Ottumwa; second, Palmer Teeg, Roland; third, Willard Goone, Roland; fourth, Russell Orr, Murray.

APPLES.

Exhibit must consist of five apples to the plate, at least six varieties. Duplicate plates count one-half.

First—Leando Douds, Keosauqua.

Duchess (of Oldenburg)—First, Bruce Straight, Keosauqua; second, Wilbur Strait, Keosauqua.

Wealthy—First, Bruce Strait, Keosauqua; second, Wilbur Strait, Keosauqua.

Grimes Golden—First, Wilbur Strait, Keosauqua; second, Bruce Strait, Keosauqua.

Jonathan—First, Wilbur Strait, Keosauqua; second, Bruce Strait, Keosauqua.

Northwestern Greening—First, Bruce Strait, Keosauqua; second, Wilbur Strait, Keosauqua.

Winesap—First, Bruce Strait, Keosauqua; second, Wilbur Strait, Keosauqua.

Ben Davis—First, Wilbur Strait, Keosauqua; second, Bruce Strait, Keosauqua.

Any Variety Not Listed—First, Bruce Strait, Keosauqua; second, Wilbur Strait, Keosauqua.

GARDEN EXHIBIT.

Club Display of Vegetables—First, Ottumwa Schools; second, McKinley School Club; third, Washington School Club; fourth, East High School Club; fifth, Cattell School Club; sixth, Hubbell School Club.

Display of Vegetables by Individual—First, Leland Anderson, Des Moines; second, Cora Davis, Ottumwa; third, Roger Breckenridge, Ottumwa; fourth, Ralph Taylor, Des Moines; fifth, Clark Baridon, Des Moines; sixth, Bertha Holt, Des Moines; seventh, Nicholas Mancuss.

Plate of Six Beets—First, Zanoh Moore, Des Moines; second, Clark Baridon, Des Moines; third, Clair Davis, Des Moines.

Plate of Dry White Beans—First, Ralph Taylor, Des Moines; second, Eleanor Spevack, Des Moines; third, Leland Anderson, Des Moines.

Plate of Other Dry Beans—First, Ralph Taylor, Des Moines; second, Thos. Taylor, Des Moines; third, Eleanor Spevack, Des Moines.

Plate of String Beans—First, Leland Anderson, Des Moines; second, Cora Davis, Ottumwa; third, Eleanor Spevack, Des Moines.

Head of Cabbage—First, Paul Foster, Des Moines; second, Leland Anderson, Des Moines; third, Cora Davis, Ottumwa.

Cucumbers (Slicing, Three or Five)—First, Claton Jones, Ottumwa; second, Cora Davis, Ottumwa; third, Bertha Holt, Des Moines.

Cucumbers (Ripe), Two or Three—First, Ivan Williams, Des Moines; second, Clark Baridon, Des Moines; third, Leland Anderson, Des Moines.

Celery, Two or Three Bunches—First, Clark Baridon, Des Moines; second, Ralph Taylor, Des Moines.

Plate of Six Carrots—First, Leland Anderson, Des Moines; second, Rocene Holt, Des Moines; third, Cora Davis, Ottumwa.

Pop Corn (Six Ears)—First, Chas. Williams, Des Moines; second, Ivan Williams, Des Moines; third, Bertha Holt, Des Moines.

Sweet Corn (Six Ears)—First, Clark Baridon, Des Moines; second, Cora Davis, Ottumwa; third, Margaret Taylor, Des Moines.

Egg Plant—First, Leland Anderson, Des Moines; second, Ruthelma Powell, Des Moines; third, Nicholas Mancuss.

Plate of Six Onions—First, Roger Breckenridge, Ottumwa; second, Leland Anderson, Des Moines; third, Bazil Plummer, Des Moines.

Plate of Six Potatoes—First, Nicholas Mancuss; second, Cora Davis, Ottumwa; third, Ethel Plummer, Des Moines.

Parsnips—First, Leland Anderson, Des Moines; second, John Woodmansee, Des Moines; third, Cora & Richard Davis, Ottumwa.

Peppers, Three or Four—First, Leland Anderson, Des Moines; second, Nicholas Mancuss; third, Clark Baridon, Des Moines.

Pumpkin—First, Alfonso Seigliano; second, Leland Anderson, Des Moines; third, Tony Caponigco.

Squash, Des Moines Queen, Two—First, Ralph Taylor, Des Moines; second, Bertha Holt, Des Moines; third, Leland Anderson, Des Moines.

Squash (Hubbard)—First, Cora Davis, Ottumwa; second, Eleanor Spevack, Des Moines; third, Bertha Holt, Des Moines.

Plate of Six Pink Tomatoes—First, Leland Anderson, Des Moines; second, Clark Baridon, Des Moines; third, Sidney Griffith, Des Moines.

Plate of Six Red Tomatoes—First, Leland Anderson, Des Moines; second, Cora Davis, Ottumwa; third, Claton Jones, Ottumwa.

Plate of Six Turnips—First, Bertha Holt, Des Moines; second, Cora Davis, Ottumwa; third, George Jordon, Des Moines.

Plate of One Quart Dry Peas—First, Bertha Holt, Des Moines.

CANNED PRODUCTS.

Individual 12-Jar Exhibit—First, Dorothy Gallagher, Ottumwa; second, Louise Swan, Council Bluffs; third, Kathryn Bolibaugh, Eddyville; fourth, Mable Lane, Waukee; fifth, Beulah Rogers, Eddyville; sixth, Esther Bond, Buffalo Center; seventh, Eddyville Canning Club, Mahaska County; eighth, Josephine Kitchen, Waukee; ninth, Katherine Capell, Council Bluffs; tenth, Lida Malloy, Albion.

Individual Jar Exhibit Not to Exceed 36 Jars—First, Katheryn Bolibaugh, Eddyville; second, Dorothy Gallagher, Ottumwa; third, Fae Hall, Hedrick.

Canning Club Exhibit of 36 Jars—Exhibit from Any Canning Club of Five or More Members—First, Eddyville Canning Club, Mahaska County; second, Swastika Canning Club, Buchanan County; third, Sunshine Canning Club, Thompson; fourth, Competine Canning Club, Ottumwa.

Apples (Whole)—Fourth, Esther Younger, Onawa.

Apples (Crab)—First, Gyneth Longcor, Eddyville; second, Esther Bond, Buffalo Center; third, Marie Longo, Grimes; fourth, Vivian Gibson, Grimes.

Apples (Pie Filling)—First, Helen Mayer, Eddyville; second, Ella Dickman, Titonka; third, Vivian Gibson, Grimes; fourth, Esther Younger, Onawa.

Blackberries—First, Louise Swan, Council Bluffs; second, Gwendolyn Davis, Givin; third, Hubert E. Pickering, Des Moines; fourth, Mary McPherson, Des Moines.

Cherries (Iowa Grown)—First, Dorothy Gallagher, Ottumwa; second, Katherine Capell, Council Bluffs; third, Vivian Gibson, Grimes; fourth, Rita Hicks, Competine.

Cherries (Imported from Other States)—First, Harrison County Sewing Club, Pisgah.

Currants (Pie)—First, Mable Davis, Pisgah; second, Claire Van Emam, Jesup; third, Helen Keyte, Grimes.

Currants (Sweet)—First, Claire Van Emam, Jesup; second, Dorothy Gallagher, Ottumwa.

Gooseberries—First, Dorothy Gallagher, Ottumwa; second, Esther Younger, Onawa; fourth, Gwendolyn Davis, Givin.

Grapes—First, Hubert E. Pickering, Des Moines; fourth, Katherine Capell, Council Bluffs.

Pears—First, Margaret Sauer, Council Bluffs; second, Caroline Miguet, Independence; fourth, Dorothy Gallagher, Ottumwa.

Peaches—Second, Mabel Lane, Waukee; third, Esther Younger, Onawa; fourth, John McGorran, Fonda.

Plums (Iowa)—First, Helen Mayor, Eddyville; second, Marie Longo, Grimes; third, Esther Bond, Buffalo Center; fourth, Elsie Kuehl, Grimes.

Plums (Imported)—First, Vivian Gibson, Grimes; second, Rita Hicks, Competine; third, Caroline Miguet, Independence; fourth, Gwendolyn Davis, Givin.

Pineapples—First, Margaret Sauer, Council Bluffs; second, Esther Younger, Onawa; third, Mary McPherson, Des Moines; fourth, Gwendolyn Davis, Givin.

Raspberries—First, Hubert E. Pickering, Des Moines; second, Dorothy Gallagher, Ottumwa; third, Opal Laidler, Pisgah; fourth, Caroline Miguet, Independence.

Rhubarb (Cubed)—Caroline Miguet, Independence; second, Margaret Sauer, Council Bluffs; third, Edith Kuehl, Grimes; fourth, Enid Dennison, Knoxville.

Strawberries—First, Grace Hall, Hedrick; second, Dorothy Gallagher, Ottumwa; third, Mary McPherson, Des Moines; fourth, Gwendolyn Davis, Givin.

Beans (String)—First, Dorothy Gallagher, Ottumwa; second, Katherine Capell, Council Bluffs; third, Catherine Phillips, Eddyville; fourth, Helen Lux, Waukee.

Beans (Green String)—First, Mary Erdman, Hedrick; second, Esther Younger, Onawa; third, Gyneth Longcor, Eddyville; fourth, Vivian Gibson, Grimes.

Beets—First, Modesta Miguet, Independence; second, Vivian Gibson, Grimes; third, Abigail Drake, Grimes; fourth, Dorothy Kinsey, Grimes.

Carrots (Young)—First, Katherine Capell, Council Bluffs; second, June Bloom, Jesup; third, Helen Mayer, Eddyville; fourth, Esther Younger, Onawa.

Corn (Sweet)—First, Louise Swan, Council Bluffs; second, Catherine Phillips, Eddyville; third, Mary McPherson, Des Moines; fourth, Marie Longo, Grimes.

Greens—First, Margaret Sauer, Council Bluffs; second, Catherine Phillips, Eddyville; third, Claire Van Emam, Jesup.

Greens (Combination)—First, Dorothy Gallagher, Ottumwa; second, Esther Younger, Onawa; third, Gwendolyn Davis, Givin; fourth, Mary McPherson, Des Moines.

Peas—First, Gwendolyn Davis, Givin; second, Mary McPherson, Des Moines; third, Esther Younger, Onawa.

Pumpkin—First, Katherine Bolibough, Eddyville.

Tomatoes (Whole)—First, Hubert E. Pickering, Des Moines; second, Mable Davis, Pisgah; third, Alice McDonald, Waukee; fourth, Marie Longo, Grimes.

Vegetable Combination—First, Esther Bond, Buffalo Center; second, Dorothea Laird, Jesup; third, Helen Mayer, Eddyville; fourth, Esther Younger, Onawa.

Beef—First, Catherine Phillips, Eddyville; second, Margaret Sauer, Council Bluffs; third, Esther Younger, Onawa.

Chicken—First, Bernice Farrel, Grimes; third, Gwendolyn Davis, Givin; fourth, Dorothea Laird, Jesup.

Meat—Third, Gwendolyn Davis, Givin.

Pork—First, Esther Younger, Onawa; second, Kathryn Bolibaugh, Eddyville.

FOOD.

Yeast Bread (White)—First, Alice Woddell, Marshalltown; second, Mrs. M. Gregg, Marshalltown; third, Cecil Nodland, Marshalltown.

Yeast Bread (Graham)—First, Pottawattamie County; second, Wapello County Sewing Club, Ottumwa; third, Florence Packman, Council Bluffs.

Spice Cake (Not Frosted)—First, Florence Packman, Council Bluffs; second, Pottawattamie County Canning Club, Oakland; third, Mrs. M. Gregg, Marshalltown.

One Dozen Fruit Drop Cookies—First, Roberta Bowers, Malcom; second, Ruth Davis, Malcom.

One Dozen Sugar Cookies—First, Flora Knight, Ottumwa; second, Roberta Bowers, Malcom; third, Mrs. M. Gregg, Marshalltown.

Yeast Bread (Graham) Exhibited by Club—First, Florence Packman, Council Bluffs; second, Pottawattamie County Canning Club; third, Pisgah Clover Canning Club; fourth, Poweshiek County Sewing Club.

Spice Cake (Not Frosted)—First, Doris Phillips, New Sharon; second, Sadie Johnson, Des Moines; third, A. J. Thurman, Oskaloosa; fourth, Mrs. M. Gregg, Marshalltown.

One Dozen Sugar Cookies—Fourth, Alice Waddell, Marshalltown.

SEWING AND GARMENT WORK.

Club Exhibit of Sewing and Garment Work—Exhibit Shall Be Composed of Garments Made by at Least Five Members of the Club, Over 15 Years—First, Poweshiek County Sewing Club; second, Wapello County Sewing Club; third, Franklin County Sewing Club; fourth, Woodbury County Sewing Club.

Individual Exhibit of Sewing and Garment Work—First, Poweshiek County Sewing Club; second, Wapello County Sewing Club; third, Wild Rose Sewing Club, Franklin County; fourth, Woodbury Sewing Club.

Club Exhibit of Sewing and Garment Work—Exhibit Shall Be Composed of Garments Made by at Least Five Members of the Club Under 15 Years—First, M. E. Ehlert, Ross; second, Grassy Lane Sewing Club, Davenport; third, Wide Awake Sewing Club, Davenport; fourth, Harrison County Sewing Club, Pisgah; fifth, Van Buren County, Keosauqua.

Individual Exhibit of Sewing and Garment Work—First, M. E. Ehlert, Ross; second, Grassy Lane Sewing Club, Davenport; third, Wide Awake Sewing Club, Davenport; fourth, Harrison County Sewing Club, Pisgah; fifth, Van Buren County, Keosauqua.

Farm Business Record—First, Carl Peterson, Missouri Valley; second, Dwight Jones, Missouri Valley; third, Wilbur Epperson, Missouri Valley; fourth, Robert Crouch Garnavillo.

Best Individual Exhibit of Club Work by Any Member of Iowa Boys and Girls' Club—First, Ruth Simmons, Sioux City; second, Pisgah Clover Canning Club, Pisgah; third, Pottawattamie County Canning Club; fourth, Florence Packman, Council Bluffs; fifth, Wapello County Sewing Club, Ottumwa; sixth, Pottawattamie County; seventh, Edith Sylvester, Council Bluffs.

Best Exhibit from Any Club Group, Consisting of Written Account of Work in Booklet Form—First, Eddyville Canning Club, Mahaska County; second, Appert Canning Club, Council Bluffs; third, Ruth Simons, Sioux City; fourth, Poweshiek County Sewing Club, Malcom; fifth, Wapello County Sewing Club, Ottumwa; sixth, Wapello Food Preparation Club, Ottumwa; seventh, Sadie Johnson, Des Moines.

Canning Demonstration Team Contest—First, Florence Packman, Council Bluffs; second, Eddyville Canning Club, Mahaska County; third, Mrs. M. Gregg, Marshalltown.

Garment Demonstration Team Contest—First, Archie Braun, Nichols; second, Poweshiek County Sewing Club; third, Scott County Garment Club, Davenport.

Food Demonstration Team Contest—First, Wapello Meal Preparation Club, Ottumwa; second, Poweshiek County Sewing Club, Malcom; third, Mrs. M. Gregg, Marshalltown.

Corn Demonstration Team Contest—First, Jefferson County Corn Club, Fairfield; second, J. P. Stack, Creston.

Apple Spraying Demonstration Team Contest—First, Van Buren County, Keosauqua.

Beef Club Demonstration Team Contest—First, J. A. Buchanan, Marshalltown; second, D. M. Korns, club leader, Hartwick; third, M. H. Fedderson, club leader, Washington.

Pig Club Demonstration Team Contest—First, Cass County Pig Club, Atlantic; second, J. A. Buchanan, Marshalltown; third, J. S. Quist, Denison.

Garden Demonstration Team Contest—First, East High School Girls, Des Moines; second, McKinley School Team, Des Moines.

Poultry Demonstration Team Contest—First, C. W. Clark, Club Leader, Ottumwa; second, J. E. Merrill, Club Leader, Spirit Lake; third, M. H. White, Leader, Sioux City.

CULINARY DEPARTMENT.

SUPERINTENDENT..........................H. O. WEAVER, Wapello

JUDGES..........................MRS. J. K. BARLOW; MRS. HATTIE SHROGER

BREAD, ETC.

Loaf Yeast Bread—First, Mrs. C. N. Hills, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Mrs. L. H. Webber, Ankeny; fourth, Mrs. J. J. Bishop, Mitchellville; fifth, J. F. Randolph, Ankeny.

Loaf Salt Rising Bread—First, Alice B. Cross, Des Moines; second, Mrs. A. A. Johnson, Gladbrook; third, Mrs. J. A. Peters, Ankeny; fourth. Mrs. Edith L. Burns, Hartford; fifth, Mrs. J. N. Cain, Hartford.

Loaf Graham Bread—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. J. A. Peters, Ankeny; third, Mrs. Frank E. Huston, Waukee; third, Mrs. F. H. Sinclair, Des Moines; fifth, Mrs. Chas. Renfro, Mitchellville.

Loaf Nut Bread—First, F. H. Groom, Des Moines; second, Mrs. F. H. Sinclair, Des Moines; third, Mrs. A. P. Stewellyn, Waukee; fourth, Mrs. A. A. Johnson, Gladbrook; fifth, Mrs. Anna Ault, Mitchellville.

Loaf Entire Wheat Bread—First, Mrs. F. H. Sinclair, Des Moines; second, Mrs. E. M. Sinclair, Des Moines; third, Mrs. L. H. Webber, Ankeny; fourth, Mrs. A. A. Johnson, Gladbrook; fifth, Mrs. Hattie Johnson, Gladbrook.

Pan of Rolls—First, Mrs. F. H. Sinclair, Des Moines; second, Rev. G. H. Bakken, Decorah; third, Mrs. E. M. Sinclair, Des Moines; fourth, Mrs. T. J. Flora, Des Moines; fifth, Mrs. J. J. Bishop, Mitchellville.

Loaf Rye Bread—First, Mrs. A. A. Johnson, Gladbrook; second, Mrs. F. H. Sinclair, Des Moines; third, Mrs. E. M. Sinclair, Des Moines; fourth, Mrs. J. A. Peters, Ankeny; fifth, Mrs. M. Kastberg, Des Moines.

Loaf Corn Bread—First, Mrs. J. A. Peters, Ankeny; second, Mrs. A. A. Johnson, Gladbrook; third, Mrs. O. W. Shetterly, Hartford; fourth, Mrs. Andrew Conn, Newton; fifth, Mrs. D. G. Reynolds, Altoona.

CAKE.

Fruit—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. A. A. Johnson, Gladbrook; third, Emma L. Thompson, Des Moines.

Pound—First, Mrs. Jesse Alexander, Indianola.

Sponge—First, Mrs. A. A. Johnson, Gladbrook; second, Mrs. Jesse Alexander, Indianola; third, Mrs. J. B. Redfield, Des Moines.

Watermelon—First, Mrs. Jesse Alexander, Indianola; second, Mrs. A. A. Johnson, Gladbrook; third, Mrs. Anna Gannon, Valley Junction.

Coffee—First, Mrs. R. B. Spencer, Des Moines; second, Mrs. Jesse Alexander, Indianola.

Marble—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Mrs. L. H. Webber, Ankeny.

Angel Food—First, Matilda Erskin, Runnells; second, Mrs. H. H. Paul, Dallas Center; third, Mrs. Wayne Casady, Carlisle.

Sunshine—First, Mrs. Frank Menzels, McCallsburg; second, Alice B. Cross, Des Monies; third, Mrs. Jesse Alexander, Indianola.

Fairy Loaf—First, Mrs. Jesse Alexander, Indianola; second, Mrs. R. W. Spencer, Des Moines.

Bride's Cake—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Elizabeth Wharton, Des Moines.

Nut Loaf (White)—First, Mrs. J. R. Bernard, Des Moines; second, Viola Strain, Des Moines; third, Mrs. Jesse Alexander, Indianola.

Devil's Food—First, Sadie E. Elliott, Mitchellville; second, Mrs. J. R. Bernard, Des Moines; third, Mrs. Andrew M. Smith, Des Moines.

White Citron—First, Mrs. Jesse Alexander, Indianola.

Cocoanut Loaf—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Jesse Alexander, Indianola.

Currant Loaf—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Jesse Alexander, Indianola.

Election Loaf—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Hattie Johnson, Gladbrook.

White Fruit—First, Mrs. Jesse Alexander, Indianola.

Gold Cake—First, Mrs. Jesse Alexander, Indianola.

Jam Cake—First, Leota Smith, Campbell; second, Mrs. Jesse Alexander, Indianola.

LAYER CAKE.

Almond—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Jesse Alexander, Indianola.

Banana—First, Mrs. Jesse Alexander, Indianola; second, E. Heydon, Mitchellville; third, Mrs. R. B. Spencer, Des Moines.

Caramel or Burnt Sugar Cake—First, Mrs. Anna Gannon, Valley Junction; second, Viola Strain, Des Moines; third, Mrs. Jesse Alexander, Indianola.

White, Caramel Frosting—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Jesse Alexander, Indianola; third, Miss Julie Tynan, Mitchellville.

Chocolate Layer (White Frosting)—First, Ina Morton, Indianola; second, Mrs. E. S. Harrop, Bondurant; third, Mrs. Frank E. Huston, Waukee.

White Layer (Chocolate Frosting)—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank E. Huston, Waukee; third, Leota Smith, Campbell.

Cocoanut—First, Mrs. Frank E. Huston, Waukee; second, Mrs. J. R. Bernard, Des Moines; third, Mrs. Jesse Alexander, Indianola.

Fig, White Layer—First, Mrs. Jesse Alexander, Indianola; second, Fred G. Mate, Des Moines.

Fig, Dark Layer—First, Mrs. Jesse Alexander, Indianola; second, E. Heydon, Mitchellville; third, Mrs. C. G. Seiverling, Mitchellville.

Jelly Layer—First, Mrs. Jesse Alexander, Indianola; second, Mrs. W. W. Preston, Avon.

Jelly Roll—First, Mrs. Jesse Alexander, Indianola; second, Mrs. W. W. Preston, Avon; third, E. Heydon, Mitchellville.

Lemon Jelly—First, Mrs. Anna Gannon, Valley Junction; second, Asa Lee, Mitchellville; third, Mrs. Jesse Alexander, Indianola.

Maple—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Jesse Alexander, Indianola.

Marshmallow—First, Mrs. Jesse Alexander, Indianola; second, Mrs. A. A. Johnson, Gladbrook; third, Mrs. Andrew Conn, Newton.

English Walnut, White—First, Cora Cook, Cambridge; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Frank E. Huston, Waukee.

Nut Spice—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Thos. Robinson, Adelphi; third, F. H. Groom, Des Moines.

Orange—First, Mrs. Jesse Alexander, Indianola.

Pineapple—First, Mrs. Jesse Alexander, Indianola.

Ribbon—First, Mrs. Frank E. Huston, Waukee; second, Mrs. Jesse Alexander, Indianola; third, Will Weible, Brighton.

White Layer (White Frosting)—First, Mrs. A. H. Gardner, Carlisle; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Frank E. Huston, Waukee.

COOKIES, ETC.

One Dozen Sugar Cookies—First, Mrs. Hattie Johnson, Gladbrook; second, Rev. G. H. Bakken, Decorah.

One Dozen Cocoanut Cookies—First, Mrs. E. M. Sinclair, Des Moines.

One Dozen Fruit Cookies—First, Mrs. M. A. Collins, Bondurant; second, Mrs. F. H. Sinclair, Des Moines.

One Dozen Nut Cookies—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Hattie Johnson, Gladbrook.

One Dozen Chocolate Cookies—First, Ferne Botsford, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

One Dozen Ginger Cookies—First, Asa Lee, Mitchellville; second, Mrs. Anna Ault, Mitchellville.

One Dozen Macaroons—First, Kate K. Van Duzee, Dubuque; second, Mrs. E. M. Sinclair, Des Moines.

One Dozen Raised Doughnuts—First, Mrs. A. A. Johnson, Gladbrook; second, Mrs. Chas. Renfro, Mitchellville.

One Dozen Baking Powder Doughnuts—First, Mrs. A. A. Johnson, Gladbrook; second, Mrs. J. J. Bishop, Mitchellville.

Loaf Hard Ginger Bread—First, Mrs. J. A. Peters, Ankeny; second, Mrs. Jesse Alexander, Indianola.

Loaf Soft Gingerbread—First, Mrs. J. A. Peters, Ankeny; second, Mrs. Hattie Johnson, Gladbrook.

One Dozen Lady Fingers—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Jesse Alexander, Indianola.

One Dozen Almond Wafers—First, Ferne Botsford, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Basket Fancy Cakes or Cookies—First, Miss June Collins, Bondurant.

HOME MADE CANDY.

Plate French Cream—First, Mrs. W. W. Preston, Avon; second, Agnes Ellis, Adelphi; third, Viola Strain, Des Moines.

Plate Chocolate Fudge—First, Mrs. J. C. Ash, Des Moines; second, Agnes Ellis, Adelphi; third, Mrs. Harry Clark, Mitchell.

Plate Chocolate Creams—First, Mrs. C. G. Seiberling, Mitchellville; second, Mrs. Chas. Watters, Altoona; third, Mrs. Thos. Robinson, Adelphi.

Plate Divinity Creams—First, Mrs. Max McVey, Des Moines; second, Gertie Erb, Pleasantville; third, Agnes Ellis, Adelphi.

Plate Taffy—First, Mrs. J. C. Ash, Des Moines; second, F. H. Groom, Des Moines; third, Helen Segler, Indianola.

Plate Butterscotch—First, Agnes Ellis, Adelphi; second, Louise Hartung, Berwick; third, Helen Segler, Indianala.

CONSERVES.

Currant—First, Hazel Plummer, Des Moines; second, Emma L. Thompson, Des Moines.

Cherry—First, Emma L. Thompson, Des Moines; second, Mrs. J. A. Peters, Ankeny.

Gooseberry—First, Hazel Plummer, Des Moines; second, Emma L. Thompson, Des Moines.

Strawberry—First, Mrs. Ella Plummer, Des Moines; second, Hazel Plummer, Des Moines.

Peach—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. Ella Plummer, Des Moines.

Rhubarb—First, Mrs. Geo. Grinstead. Mitchellville; second, Mrs. Ella Plummer, Des Moines.

Orange Marmalade—First, Mrs. C. C. McGrew, Des Moines; second, Emma L. Thompson, Des Moines.

SUN PRESERVED FRUIT.

Strawberry Sunshine—First, Mrs. Eliza Henderson, Des Moines; second, Emma L. Thompson, Des Moines.

Red Raspberry Sunshine—First, Mrs. Ella Plummer, Des Moines; second, Emma L. Thompson, Des Moines.

Cherry Sunshine—First, Mrs. Ella Plummer, Des Moines; second, Hazel Plummer, Des Moines.

Peach Sunshine—First, Emma L. Thompson, Des Moines; second, Mrs. Ella Plummer, Des Moines.

PRESERVES.

Apple—First, Mrs. W. W. Preston, Avon; second, Mrs. Ella Plummer, Des Moines.

Apricot—First, Emma L. Thompson, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

Cherry—First, Mrs. Ella Plummer, Des Moines; second, Hazel Plummer, Des Moines.

Crabapple—First, Mrs. F. H. Sinclair, Des Moines.

Currant—First, Mrs. Ella Plummer, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

Citron—First, Emma L. Thompson, Des Moines; second, R. L. Thompson, Des Moines.

Cranberry—First, R. L. Thompson, Des Moines; second, Emma L. Thompson, Des Moines.

Blackberry—First, Hazel Plummer, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Gooseberry—First, Leota Smith, Campbell.

Black Raspberry—First, Rev. G. H. Bakken, Decorah.

Strawberry—First, Emma L. Thompson, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Peach—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Pear—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Plum—First, Mrs. Anna Gannon, Valley Junction; second, Mrs. Ella Plummer, Des Moines.

Quince—First, R. L. Thompson, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Tomato—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Fannie McClain, Adelphi.

Watermelon—First, Mrs. Geo. Grinstead, Mitchellville; second, Emma L. Thompson, Des Moines.

Pineapple—First, Mrs. M. Kastberg, Des Moines; second, Rev. G. H. Bakken, Decorah.

Red Raspberry—First, Mrs. Ella Plummer, Des Moines; second, Mrs. L. H. Webber, Ankeny.

JELLIES.

Apple—First, Mrs. C. C. McGrew, Des Moines; second, Agnes Ellis, Adelphi.

Black Raspberry—First, Mrs. A. A. Johnson, Gladbrook; second, Mrs. M. Kastberg, Des Moines.

Blackberry—First, Mrs. M. Kastberg, Des Moines; second, Mrs. A. Slavens, Colfax.

Crabapple—First, Mrs. M. Kastberg, Des Moines; second, Alice B. Cross, Des Moines.

Cherry—First, Mrs. M. Kastberg, Des Moines; second, Maud Bierma, Adelphi.

Currant (White)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Currant (Red)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Andrew Conn, Newton.

Cranberry—First, Mrs. M. Kastberg, Des Moines.

Gooseberry—First, Mrs. M. Kastberg, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

Haw (Red)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. W. W. Preston, Avon.

Grape (Dark)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. R. J. Griffieon, Mitchellville.

Grape (White)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. J. E. Grant, Carlisle.

Grape (Wild)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Wm. Gannon, Valley Junction.

Pineapple—First, Mrs. M. Kastberg, Des Moines; second, Mrs. A. A. Johnson, Gladbrook.

Peach—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Wm. Gannon, Valley Junction.

Pear—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Plum—First, Mrs. W. W. Preston, Avon; second, Mrs. M. Kastberg, Des Moines.

Quince—First, Mrs. M. Kastberg, Des Moines; second, Anna Green, Beech.

Rhubarb—First, Mrs. Hattie Johnson, Gladbrook; second, Mrs. A. A. Johnson, Gladbrook.

Red Raspberry—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Pearl Brown, Des Moines.

Strawberry—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Chas. Renfro, Mitchellville.

BUTTERS.

Apple—First, Mrs. Walter Lee, Mitchellville; second, Mrs. W. W. Preston, Avon.

Black Raspberry—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. E. M. Sinclair, Des Moines.

Cherry—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. M. Kastberg, Des Moines.

Crabapple—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. E. M. Sinclair, Des Moines.

Currant—First, Mrs. M. Kastberg, Des Moines.

Gooseberry—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. Anna Gannon, Valley Junction.

Grape (Tame)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Grape (Wild)—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Girnstead, Mitchellville.

Peach—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Plum—First, Mrs. W. W. Preston, Avon; second, Agnes Ellis, Adelphi.

Pineapple—First, Mrs. M. Kastberg, Des Moines; second, Mrs. C. C. McGrew, Des Moines.

Quince—First, Mrs. M. Kastberg, Des Moines; second, Emma L. Thompson, Des Moines.

Red Raspberry—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Knute Bjorka, Northwood.

Rhubarb—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Strawberry—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. M. Kastberg, Des Moines.

JAMS.

Apple—First, Mrs. Ella Plummer, Des Moines; second, Hazel Plummer, Des Moines.

Black Raspberry—First, Mrs. J. C. Ash, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Cranberry—First, Emma L. Thompson, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Blackberry—First, F. H. Groom, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Crabapple—First, Mrs. Ella Plummer, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Currant—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

Gooseberry—First, Mrs. Ella Plummer, Des Moines; second, Ida B. McCampbell, Des Moines.

Pineapple—First, Mrs. M. Kastberg, Des Moines.

Peach—First, Mrs. Knute Bjorka, Northwood; second, Mrs. Geo. Grinstead, Mitchellville.

Pear—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. M. Kastberg, Des Moines.

Plum—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. M. Kastberg, Des Moines.

Strawberry—First, Mrs. Andrew Conn, Newton; second, Mrs. Geo. Grinstead, Mitchellville.

Quince—First, R. L. Thompson, Des Moines; second, Emma L. Thompson, Des Moines.

Tomato—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. E. M. Sinclair, Des Moines.

SOUR PICKLES, CATSUP AND VINEGAR.

Beet—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. F. H. Sinclair, Des Moines.

Bean—First, Mrs. C. C. McGrew, Des Moines.

Cucumber—First, Mrs. G. F. Carpenter, Ackworth; second, Mrs. L. O. Burt, Valley Junction.

Onion—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Ben Renand, Ankeny.

Tomato—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. C. C. McGrew, Des Moines.

Mixed—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. C. C. McGrew, Des Moines.

Chow Chow—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. H. R. Schulz, Des Moines.

Piccalilli—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. M. Kastberg, Des Moines.

Chili Sauce—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. Frank E. Huston, Waukee.

Tomato Catsup—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. C. C. McGrew, Des Moines.

Cucumber Catsup—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. Anna Gannon, Valley Junction.

Walnut Catsup—First, W. A. Pickering, Des Moines; second, W. M. Riley, Patterson.

Home Made Cider Vinegar—First, Hazel Plummer, Des Moines; second, Mrs. Ella Plummer, Des Moines.

CANNED FRUITS, SPICED GOODS AND SWEET PICKLES.

Apple—First, Mrs. W. W. Preston, Avon; second, Mrs. C. C. McGrew, Des Moines.

Apricot—First, Mrs. C. C. McGrew, Des Moines; second, Chas. H. Young, Ankeny.

Blackberries—First, Hazel Plummer, Des Moines; second, Mrs. Ella Plummer, Des Moines.

Cherries—First, Mrs. Walter Young, Ankeny; second, Mrs. Knute Bjorka. Northwood.

Crabapples—First, Mrs. Knute Bjorka, Northwood; second, Mrs. S. W. Barrett, Mitchellville.

Currants (White)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Anna Gannon, Valley Junction.

Currants (Red))—First, Mrs. Anna Gannon, Valley Junction; second, Mrs. C. C. McGrew, Des Moines.

Gooseberries—First, Mrs. Geo. Newkirk, Des Moines; second, Mrs. Ella Plummer, Des Moines.

Grapes (White)—First, Mrs. Ella Plummer, Des Moines; second, Hazel Plummer, Des Moines.

Grapes (Blue)—First, Mrs. Ella Plummer, Des Moines; second, Hazel Plummer, Des Moines.

Ground Cherries—First, F. H. Groom, Des Moines; second, Rev. G. H. Bakken, Decorah.

Peaches—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Ben Renand, Ankeny.

Pears—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Plums—First, Mrs. Anna Gannon, Valley Junction; second, Mrs. Wm. Gannon, Valley Junction.

Raspberries (Red)—First, Mrs. C. C. McGrew, Des Moines; second, W. A. Pickering, Des Moines.

Raspberries (Black)—First, Mrs. C. C. McGrew, Des Moines; second, Ina Morton, Indianola.

Rhubarb—First, Mrs. Knute Bjorka, Northwood; second, F. H. Groom, Des Moines.

Strawberries—First, Mrs. Ella Fairchild, Des Moines; second, Ida B. McCampbell, Des Moines.

SPICED GOODS.

Apple—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. C. C. McGrew, Des Moines.

Cherries—First, Mrs. J. C. Ash, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Currants—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. E. M. Sinclair, Des Moines.

Gooseberries—First, Mrs. Ella Plummer, Des Moines.

Peach—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. M. Kastberg, Des Moines.

Pear—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Plum—Mrs. Geo. Grinstead, Mitchellville; second, Mrs. C. C. McGrew, Des Moines.

SWEET PICKLES.

Apple.—First, Mrs. J. E. Grant, Carlisle.

Citron—First, Mrs. Geo. Grinstead, Mitchellville; second, W. A. Pickering, Des Moines.

Crabapple—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. L. W. Stuart, Des Moines.

Cucumber—First, Mrs. M. Kastberg, Des Moines; second, Mrs. Ben Renand, Ankeny.

Peach—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Geo. Grinstead, Mitchellville.

Pear—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Frank E. Huston, Waukee.

Watermelon—First, Mrs. Geo. Grinstead, Mitchellville; second, Emma L. Thompson, Des Moines.

Mixed—First, Hazel Plummer, Des Moines; second, Mrs. Ella Plummer, Des Moines.

CANNED VEGETABLES.

Corn—First, Mrs. Frank E. Huston, Waukee; second, Sadie E. Elliott, Mitchellville.

String Beans—First, F. L. Overly, Indianola; second, Mrs. Frank E. Huston, Waukee.

Shelled Beans—First, Mrs. J. R. Griffieon, Mitchellville; second, Mrs. Geo. Grinstead, Mitchellville.

Peas—First, Mrs. Ben Renand, Ankeny; second, Mrs. Knute Bjorka, Northwood.

Beets—First, Mrs. Geo. Grinstead, Mitchellville; second, Madema Freel, Pleasantville.

Spinach—First, Mrs. Garfield Lee, Mitchellville; second, F. H. Groom, Des Moines.

Other Greens—First, Mrs. Anna Gannon, Valley Junction; second, Mrs. E. M. Sinclair, Des Moines.

Asparagus—First, Mrs. Ella Plummer, Des Moines; second, Hazel Plummer, Des Moines.

Tomatoes—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Chas. Renfro, Mitchellville.

Young Carrots—First, Mrs. Knute Bjorka, Northwood; second, Beatrice Erb, Pleasantville.

Mixed Vegetables (for Soup)—First, Mrs. Geo. Grinstead, Mitchellville; second, Mrs. C. C. McGrew, Des Moines.

Pumpkin (for Pies)—First, Mrs. C. C. McGrew, Des Moines; second, Mrs. Geo. B. Brackett, Runnells.

CANNED MEAT.

Chicken—First, Mrs. Frank E. Huston, Waukee; second, Mrs. J. L. Farrell, Ankeny.

Beef—First, Anna Spahr, Slater; second, Mrs. Ben Renand, Ankeny.

Rabbit—Mrs. C. C. McGrew, Des Moines.

Sausage—First, Mrs. J. A. Peters, Ankeny; second, Mrs. L. H. Webber, Ankeny.

Fish—First, Mrs. C. C. McGrew, Des Moines.

HONEY, BEES, ETC.

JUDGE..E. W. ATKINS, Ames

Case White Clover Honey, 24 Sections—First, R. H. Longworth, Ames; second, Bert A. Brown, Des Moines; third, Eunice Longworth, Ames.

Case Linden Honey, 24 Sections—First, R. H. Longworth, Ames; second, Bert A. Brown, Des Moines; third, Eunice Longworth, Ames.

Case Sweet Clover Honey, 24 Sections—First, R. H. Longworth, Ames; second, Eunice Longworth, Ames; third, Bert A. Brown, Des Moines.

Case Any Other White Comb Honey, 24 Sections—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

Case Buckwheat, Heartsease, or Any Other Dark Honey, 24 Sections, May Be One Year Old—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

Best 300 Pounds Comb Honey, Quality and Manner of Putting Up for Market Considered—First, R. H. Longworth, Ames; second, Bert A. Brown, Des Moines; third, Eunice Longworth, Ames.

Display, Showing Grades and Varieties of Comb Honey, With Labels—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

Most Attractive Display of Comb Honey (May Include Classes 2313-2318, Inclusive)—First, R. H. Longworth, Ames; second, Eunice Longworth, Ames; third, Bert A. Brown, Des Moines.

White Clover Extracted Honey in Glass, Not Less Than 24 Pounds—First, C. H. True, Edgewood; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

Linden Extracted Honey in Glass, 24 Pounds or More—First, C. H. True, Edgewood; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

Sweet Clover Extracted Honey in Glass, 24 Pounds or More—First, Eunice Longworth, Ames; second, R. H. Longworth, Ames; third, Bert A. Brown, Des Moines.

Other White Extracted Honey in Glass, 24 Pounds or More—First, C. H. True, Edgewood; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

Buckwheat, Heartsease or Any Other Dark Extracted Honey in Glass, 24 Pounds or More—First, C. H. True, Edgewood; second, Bert A. Brown, Des Moines; third, R. H. Longworth, Ames.

Granulated Extracted Honey, Best and Most Attractive, 12 Pounds or More—First, C. H. True, Edgewood; second, Bert A. Brown, Des Moines; third, R. H. Longworth, Ames.

Display of Labeled Samples of Extracted Honey, Not Less Than One-half Pound Each—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames.

Most Attractive Display of Extracted Honey, Including Classes 2321 to 2326, Inclusive—First, Bert A. Brown, Des Moines; second, C. H. True, Edgewood; third, R. H. Longworth, Ames.

Honey Vinegar, Not Less Than One Gallon—First, R. H. Longworth, Ames; second, Bert A. Brown, Des Moines; third, Eunice Longworth, Ames.

Nucleus Golden Yellow Italians and Queen in Observation Hive—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

Leather Colored Italians and Queen in Observation Hive—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames.

Best Display Cooking or Baking With Honey Instead of Sugar for Sweetening—First, Bert A. Brown, Des Moines; second, Eunice Longworth, Ames; third, F. E. Heilman, Fort Dodge.

Best Queens Shown in Cages—First, R. H. Longworth, Ames; second, Eunice Longworth, Ames; third, Bert A. Brown, Des Moines.

Queen-Rearing Outfit—First, R. H. Longworth, Ames; second, Bert A. Brown, Des Moines; third, Eunice Longworth, Ames.

Most Perfect Brood Combs, Not Less Than Three—Second, Bert A. Brown, Des Moines.

Beeswax, 10 Pounds—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

SWEEPSTAKES.

Largest and Most Attractive Exhibit in This Department, Including Bees, Honey, Beeswax, Tools, Etc.—First, Bert A. Brown, Des Moines; second, R. H. Longworth, Ames; third, Eunice Longworth, Ames.

DAIRY BUTTER.

Judges.. F. W. Stevenson
W. B. Barney
H. E. Forrester
Roy Scholes

Ten-Pound Tub, Pro Rata, $60—First, Kate Adamson, Ankeny; second, A. C. Adamson, Ankeny.

SWEEPSTAKES.

First, Kate Adamson, Ankeny; second, A. C. Adamson, Ankeny.

CHEESE.

Best Exhibit of Cheese, Each Exhibit to Consist of Not Less Than Twenty Pounds—First, Fred S. Hadley, Marshfield, Wis.; second, Bert McKinney, Mineral Point, Wis.; third, Wm. L. Walsh, Plattsville, Wis.

FRUIT DEPARTMENT.

SUPERINTENDENT............................E. L. REEVES, Waverly

JUDGE.....................................W. J. KOCKEN, Ames

APPLES FROM NORTHERN DISTRICT.

Collection, Not Less than 20 Varieties Nor More Than 50—First, C. H. True, Edgewood; second, Isaac Johnson, West Union; third, O. O. Lomen, Decorah; fourth, P. M. Peterson, Cherokee.

Four Varieties, Summer—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, Isaac Johnson, West Union; fourth, P. M. Peterson, Cherokee.

Six Varieties, Fall—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, P. M. Peterson, Cherokee; fourth, Isaac Johnson, West Union.

Six Varieties, Winter—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee; fourth, Isaac Johnson, West Union.

APPLES FROM CENTRAL DISTRICT.

JUDGE.....................................H. E. NICHOLS, Ames

Collection, Not Less Than 20 Varieties or More Than 50—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, F. O. Harrington, Williamsburg; fourth, Orchard Developing Club, Le Grand.

Four Varieties, Summer—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, F. O. Harrington, Williamsburg; fourth, N. F. Ambrose, Roland.

Six Varieties, Fall—First, Orchard Developing Club, Le Grand; second, M. J. Woorth, Mondamin; third, E. O. Worth, Mondamin; fourth, F. O. Harrington, Williamsburg; fifth, N. F. Ambrose, Roland.

Six Varieties, Winter—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, Orchard Developing Club, Le Grand; fourth, F. O. Harrington, Wililamsburg; fifth, N. F. Ambrose, Roland.

APPLES FROM CAPITAL DISTRICT.

JUDGE.....................................R. S. HERRICK, Des Moines

Collection, Not Less Than 20 Varieties or More Than 50—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Apple Grove Orchards, Mitchellville; fourth, Walter Russell, Indianola.

Four Varieties, Summer—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, Apple Grove Orchards, Mitchellville; fourth, Walter Russell, Indianola.

Six Varieties, Fall—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Apple Grove Orchards, Mitchellville; fourth, Walter Russell, Indianola.

Six Varieties, Winter—First, C. O. Garrett, Des Moines; second, Apple Grove Orchards, Mitchellville; third, Cyrus E. Harvey, Altoona; fourth, Walter Russell, Indianola.

APPLES FROM SOUTHERN DISTRICT.

JUDGE.................................F. M. HARRINGTON, Ames

Collection, Not Less Than 20 Varieties or More Than 50—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, A. R. Soder, Hartford; fourth, J. A. McFerrin, Indianola; fifth, Lena E. Gwinn, Swan.

Four Varieties, Summer—First, Thos. Enright, Patterson; second, Geo. A. Schurk, Ft. Madison; third, J. F. Wellons, Indianola; fourth, Helen Gwinn, Swan; fifth, Lena E. Gwinn, Swan.

Six Varieties, Fall—First, Helen Gwinn, Swan; second, Lena E. Gwinn, Swan; third, Thos. Enright, Patterson; fourth, A. R. Soder, Hartford; fifth, J. F. Wellons, Indianola.

Six Varieties, Winter—First, Thos. Enright, Patterson; second, A. R. Soder, Hartford; third, Helen Gwinn, Swan; fourth, Lena E. Gwinn, Swan; fifth, W. E. Utterback, Sigourney.

APPLES, HOME ORCHARD COLLECTION.

JUDGE...W. J. KOCKEN, Ames

NORTHERN DISTRICT.

First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union; fourth, P. M. Peterson, Cherokee.

CENTRAL DISTRICT.

First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, Orchard Developing Club, Le Grand; fourth, F. O. Harrington, Williamsburg.

CAPITAL DISTRICT.

First, Apple Grave Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines.

SOUTHERN DISTRICT.

First, Thos. Enright, Patterson; second, J. F. Wellons, Indianola; third, Lena E. Gwinn, Swan; fourth, J. A. McFerrin, Indianola; fifth, A. R. Soder, Hartford.

PACKAGE COMMERCIAL APPLES.

JUDGES.................................. { H. E. NICHOLS, Ames
{ F. M. HARRINGTON, Ames

NORTHERN DISTRICT.

Duchess—Second, O. O. Lomen, Decorah. Wealthy—First, O. O. Lomen, Decorah; second, P. M. Peterson, Cherokee. Chenango—First, P. M. Peterson, Cherokee. Northwestern Greening—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood. Jonathan—First, C. H. True, Edgewood; second, Isaac Johnson, West Union. Grimes—First, C. H. True, Edgewood; second, P. M. Peterson, Cherokee. Optional—First, O. O. Lomen, Decorah; second, P. M. Peterson, Cherokee. Optional—First, O. O. Lomen, Decorah. Optional—First, E. M. Reeves, Waverly.

Central District.

Duchess—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Wealthy—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin. Northwestern Greening—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Jonathan—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin. Maiden Blush—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Grimes—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Chenango—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. York Imperial—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin. Wagenor—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Ben Davis—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin.

Capital District.

Duchess—First, Cyrus E. Harvey, Altoona; second, E. O. Garrett, Des Moines. Wealthy—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Chenango—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Maiden Blush—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Northwestern Greening—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Jonathan—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Grimes—First, Cyrus E. Harvey, Altoona; second, Apple Grove Orchards, Mitchellville; third, C. O. Garrett, Des Moines. Ben Davis—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Optional—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Optional—First, C. O. Garrett, Des Moines; second, Apple Grove Orchards, Mitchellville; third, Cyrus E. Harvey, Altoona. Optional—First, Cyrus E. Harvey, Altoona; second, Apple Grove Orchards, Mitchellville; third, C. O. Garrett, Des Moines.

Southern District.

Wealthy—First, Thos. Enright, Patterson; second, J. A. McFerrin, Indianola. Maiden Blush—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, Lena E. Gwinn, Swan. Duchess—First, A. R. Soder, Hartford; second, J. F. Wellons, Indianola. Northwestern Greening—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson. Jonathan—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, A. R. Soder, Hartford. Grimes—First, Thos. Enright, Patterson; second, Geo. A. Schurk, Ft. Madison. Chenango—First, A. R. Soder, Hartford. Optional—First, Geo A. Schurk, Ft Madison; second, A. R. Soder, Hartford; third, Thos. Enright, Patterson. Optional—First, Geo. A. Schurk, Ft. Madison; second, J. A. McFerrin, Indianola; third, Thos. Enright, Patterson. Optional—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, J. A. McFerrin, Indianola.

APPLES STORED FROM PREVIOUS YEAR.

Best Box of Apples Stored from Last Year's Crop—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona.

Best Plate of Each of Five Varieties Stored as Above With Method of Storing Stated, Premium on Each Variety—Mann—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. Winesap—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. Willowtwig—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. Arkansas Black—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. King David—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona.

UNNAMED SEEDLING APPLES.

JUDGES.................................. { R. S. HERRICK, Des Moines
H. E. NICHOLS, Ames }

Six Specimens to Constitute Plate—First, J. F. Wellons, Indianola; second, J. W. Pearson, Mitchellville; third, E. O. Worth, Mondamin; fourth, E. M. Reeves, Waverly.

Best Exhibit Seedling Apples—First, O. O. Lomen, Decorah; second, Cyrus E. Harvey, Altoona.

PLATES APPLES FROM NORTHERN DISTRICT.

JUDGE..W. J. KOCKEN, Ames

Premiums on Each Variety.

Yellow Transparent—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union. Duchess—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee. Wealthy—First, E. M. Reeves, Waverly; second, C. H. True, Edgewood; third, O. O. Lomen, Decorah. Longfield—First, O. O. Lomen, Decorah; second, E. M. Reeves, Waverly; third, Isaac Johnson, West Union. Whitney—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union; third, C. H. True, Edgewood. Kaump—First, C. H. True, Edgewood; second, P. M. Peterson, Cherokee; third, O. O. Lomen, Decorah. Charlamoff—First, E. M. Reeves, Waverly; second, C. H. True, Edgewood. Fameuse—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, P. M. Peterson, Cherokee. Wolf River—First, O. O. Lomen, Decorah; third, E. M. Reeves, Waverly. Hibernal—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union; third, P. M. Peterson, Cherokee. Pewaukee—First, Isaac Johnson, West Union; second, C. H. True, Edgewood; third, P. M. Peterson, Cherokee. Patten's Greening—First, O. O. Lomen, Decorah; second, P. M. Peterson, Cherokee; third, E. M. Reeves, Waverly. Northwestern Greening—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union. Malinda—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee. Plum Cider—First, C. H. True, Edgewood; second, Isaac Johnson, West Union; third, O. O. Lomen, Decorah. Eastman—First, C. H. True, Edgewood; second, E. M. Reeves, Waverly; third, O. O. Lomen, Decorah. Fall Orange—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union. Salome—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, Isaac Johnson, West Union. Iowa Blush—First, C. H. True, Edgewood; second, P. M. Peterson, Cherokee; third, O. O. Lomen, Decorah. Black Annette—First, C. H. True, Edgewood; second, Isaac Johnson, West Union; third, O. O. Lomen, Decorah. Tolman Sweet—First, C. H. True, Edgewood; third, P. M. Peterson, Cherokee. Gano—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, P. M. Peterson, Cherokee. Jonathan—First, Isaac Johnson, West Union; second, O. O. Lomen, Decorah; third, C. H. True, Edgewood. Colorado Orange—First, C. H. True, Edgewood; second, E. M. Reeves, Waverly; third, O. O. Lomen, Decorah. Windsor—First, C. H. True, Edgewood; second, E. M. Reeves, Waverly; third, O. O. Lomen, Decorah. Willow—First, C. H. True, Edgewood; second, Isaac Johnson, West Union. Golden Russett—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union; third, P. M. Peterson, Cherokee. Red Raspberry—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union. Delicious—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union. Sapps of Wine—First, O. O. Lomen, Decorah; second, E. M. Reeves, Waverly; third, C. H. True, Edgewood. Hass—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, P. M. Peterson, Cherokee. Knowlswinter—First,

C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, E. M. Reeves, Waverly. McIntosh—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, Isaac Johnson, West Union. Ben Davis—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee. Walbridge—First, P. M. Peterson, Cherokee; second, Isaac Johnson, West Union; third, O. O. Lomen, Decorah. Kristmas—First, O. O. Lomen, Decorah; second, C. H. True, Edgewood; third, P. M. Peterson, Cherokee. Antinovsky—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union; third, C. H. True, Edgewood. Anisem—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union; third, C. H. True, Edgewood. Winter Duchess—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union; third, C. H. True, Edgewood. Scott's Winter—First, O. O. Lomen; second, Isaac Johnson; third, P. M. Peterson.

PLATES APPLES FROM CENTRAL DISTRICT.

JUDGE....................................H. E. NICHOLS, Ames

Premiums on Each Variety.

Duchess—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, Orchard Developing Club, Legrand. Benoni—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, F. O. Harrington, Williamsburg. Lowell—First, F. O. Harrington, Williamsburg; second, E. O. Worth, Mondamin. Chenango—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, F. O. Harrington, Williamsburg. Wealthy—First, Orchard Developing Club, Legrand; second, S. A. Carpenter, Malcolm; third, E. O. Worth, Mondamin. Dyer—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin. Maiden Blush—First, E. O. Worth, Mandamin; second, M. J. Worth, Mondamin; third, F. O. Harrington, Williamsburg. Wolf River—First, Orchard Developing Club, Legrand; second, F. O. Harrington, Williamsburg; third, E. J. Jump, Waukee. McMahon—First, F. O. Harrington, Williamsburg. Fameuse—First, Orchard Developing Club, Legrand; second, F. O. Harrington, Williamsburg; third, E. O. Worth, Mondamin. Delicious—First, F. O. Harrington, Williamsburg; second, M. J. Worth, Mondamin; third, E. O. Worth, Mondamin. Perry Russet—Second, M. J. Worth, Mondamin; third, E. O. Worth, Mondamin. Senator—Second, F. O. Harrington, Williamsburg. Grimes Golden—First, E. O. Worth, Mondamin; second, F. O. Harrington, Williamsburg; third, M. J. Worth, Mondamin. Jonathan—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, Orchard Developing Club, Legrand. Esopus Spitsenberg—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin. Wagner—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, F. O. Harrington, Williamsburg. Stayman—First, F. O. Harrington, Williamsburg; second, M. J. Worth, Mondamin. Tolman Sweet—First, Orchard Developing Club, Legrand; second, M. J. Worth, Mondamin; third, E. O. Worth, Mondamin. Rome Beauty—First, F. O. Harrington, Williamsburg; second, M. J. Worth, Mondamin; third, E. O. Worth, Mondamin. Northwestern Greening—First, Orchard Developing Club, Legrand; second, M. J. Worth, Mondamin; third, E. O. Worth, Mondamin. York Imperial—First, E. O. Worth, Mondamin; second, F. O. Harrington, Williamsburg; third, M. J. Worth, Mondamin. Salome—First, M. J. Worth, Mondamin; second, F. O. Harrington, Williamsburg; third, E. O. Worth, Mondamin. Missouri Pippin—First, E. O. Worth, Mondamin; second, F. O. Harrington, Williamsburg; third, M. J. Worth, Mondamin. Ben Davis—First, M. J. Worth, Mondamin; second, Orchard Developing Club, Legrand; third, E. O. Worth, Mondamin. Gano—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, N. F. Ambrose, Roland. Minkler—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, F. O. Harrington, Williamsburg. Janet—First, M. J. Worth, Mondamon; second, N. F. Ambrose, Roland; third, E. O. Worth, Mondamin. Winesap—First, M. J. Worth, Mondamin; second, N. F. Ambrose, Roland; third,

E. O. Worth, Mondamin. Arkansas Blk.—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, F. O. Harrington, Williamsburg. Ten Varieties, Optional—Beachem's Sweet—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, N. F. Ambrose, Roland. Sheriff—First, Orchard Developing Club, Legrand; second, M. J. Worth, Mondamin; third, E. O. Worth, Mondamin. Plumb Cider—First, Orchard Developing Club, Legrand; second, F. O. Harrington, Williamsburg; third, E. O. Worth, Mondamin. Rombo—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, Orchard Developing Club, Legrand. Northern Spy—First, M. J. Worth, Mondamin; second, N. F. Ambrose, Roland; third, E. O. Worth, Mondamin. Autumn Strawberry—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, Orchard Developing Club, Legrand. Shaw's Sweet—First, Orchard Developing Club, Legrand; second, N. F. Ambrose, Roland; third, M. J. Worth, Mondamin. Huntsman—First, M. J. Worth, Mondamin; second, Orchard Developing Club, Legrand; third, E. O. Worth, Mondamin. Arkansas Black—First, E. O. Worth, Mondamin; second, F. O. Harrington, Williamsburg; third, Orchard Developing Club, Legrand. Rusno 184—First, Orchard Developing Club, Legrand; second, M. J. Worth, Mondamin; third, F. O. Harrington, Williamsburg.

PLATES APPLES FROM CAPITAL DISTRICT.

JUDGE..................................R. S. HERRICK, Des Moines

Premiums on Each Variety.

Yellow Transparent—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. Lowell—First, Cyrus E. Harvey, Altoona; second, Apple Grove Orchards, Mitchellville; third, Walter Russell, Indianola. Duchess—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. Maiden Blush—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, Walter Russell, Indianola. Wealthy—First, C. O. Garrett, Des Moines; second, Apple Grove Orchards, Mitchellville; third, Cyrus E. Harvey, Altoona. Snow—First, C. O. Garrett, Des Moines; second, Apple Grove Orchards, Mitchellville; third, Cyrus E. Harvey, Altoona. Salome—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Walter Russell, Indianola. Wolf River—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Mrs. H. A. Cornwell, Ankeny. York—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Apple Grove Orchards, Mitchellville. Price's Sweet—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Roman Stem—First, C. O. Garrett, Des Moines; second, Walter Russell, Indianola; third, Apple Grove Orchards, Mitchellville. Grimes—First, Cyrus E. Harvey, Altoona; second, Apple Grove Orchards, Mitchellville; third, C. O. Garrett, Des Moines. Jonathan—First, Apple Grove Orchards, Mitchellville; second, J. R. Griffieon, Mitchellville; third, Cyrus E. Harvey, Altoona. Gano—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Ben Davis—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Black Twig—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Winesap—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, Walter Russell, Indianola. Minkler—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Walter Russell, Indianola. Northwestern Greening—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, Walter Russell, Indianola. Chenango—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Walter Russell, Indianola. Willow Twig—First, Walter Russell, Indianola; second, Cyrus E. Harvey, Altoona; third, Apple Grove Orchards, Mitchellville. Longfield—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Rome Beauty—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Walter Russell, Indianola. Delicious—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Stayman—First, Cyrus E. Harvey, Altoona. McMahon—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Red June—First, Apple Grove Orchards, Mitchellville; second, C. O. Garrett, Des Moines; third, Cyrus E. Harvey, Altoona. Dyer—First, C. O. Garrett, Des Moines; second, J. W. Pearson, Mitchellville; third, Cyrus E. Harvey, Altoona. Benoni—First, Apple Grove Orchards, Mitchellville; second, C. O. Garrett, Des Moines; third, Cyrus E. Harvey, Altoona. Senator—First, Apple Grove Orchards, Mitchellville; second, C. O. Garrett, Des Moines. Ten Varieties, Optional—Janet—First, Utters Red, C. O. Garrett, Des Moines; second, J. R. Griffieon, Mitchellville; third, Cyrus E. Harvey, Altoona. Penoc—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, J. W. Pearson, Mitchellville. Flora Belle—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, J. W. Pearson, Mitchellville. Coles Quince—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Apple Grove Orchards, Mitchellville. Red Astrakan—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, J. W. Pearson, Mitchellville. Liveland—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines. Northern Spy—First, Cyrus E. Harvey, Altoona; second, Apple Grove Orchards, Mitchellville; third, C. O. Garrett, Des Moines. Black Annette—First, Cyrus Cyrus E. Harvey, Altoona; second, Apple Grove Orchards, Mitchellville; third, C. O. Garrett, Des Moines. Winter Banana—First, C. O. Garrett, Des Moines; second, Apple Grove Orchards, Mitchellville; third, Cyrus E. Harvey, Altoona.

PLATES APPLES FROM SOUTHERN DISTRICT.

JUDGE....................................F. M. HARRINGTON, Ames

Premiums on Each Variety.

Yellow Transparent—First, J. F. Wellons, Indianola; second, Geo. A. Schurk, Ft. Madison; third, Thos. Enright, Patterson. Maiden Blush—First, Geo. A. Schurk, Ft. Madison; second, J. A. McFerrin, Indianola; third, Lena E. Gwinn, Swan. Utter's Red—First, Thos. Enright, Patterson; second, A. R. Soder, Hartford; third, G. F. Wisecup, Woodward. Grimes Golden—First, A. R. Soder, Hartford; second, Geo. F. Schurk, Ft. Madison; third, Helen Gwinn, Swan. Duchess—First, Thos. Enright, Patterson; second, Geo. A. Schurk, Ft. Madison; third, A. R. Soder, Hartford. Jonathan—First, Thos. Enright, Patterson; second, W. E. Utterback, Sigourney; third, Helen Gwinn. Swan. Salome—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, Helen Gwinn, Swan. King David—First, A. R. Soder, Hartford; second, Bess Geissinger, Des Moines; third, Geo. A. Schurk, Ft. Madison. Snow—First, Thos. Enright, Patterson; second, A. R. Soder, Hartford; third, Helen Gwinn, Swan. Wolf River—First, Thos. Enright, Patterson; second, Lena E. Gwinn, Swan; third, Geo. F. Schurk, Ft. Madison. Gano—First, Geo. F. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, Mrs. Chas. Waters, Altoona. Benoni—First, Geo. F. Schurk, Ft. Madison; second, A. R. Soder, Hartford; third, Helen Gwinn, Swan. Roman Stem—First, J. A. McFerrin, Indianola; second, Thos. Enright, Patterson; third, Helen Gwinn, Swan. Iowa Blush—First, A. R. Soder, Hartford; second, Lena E. Gwinn, Swan; third, Helen Gwinn, Swan. York Imperial—First, A. R. Soder, Hartford; second, Lena E. Gwinn, Swan; third, Geo. A. Schurk, Ft. Madison. Tolman Sweet—First, Thos. Enright, Patterson; second, Helen Gwinn, Swan; third, Lena E. Gwinn, Swan. Chenango—First, A. R. Soder, Hartford; second, Lena E. Gwinn, Swan; third, J. F. Wellons, Indianola. Mammoth Black Twig—First, Thos. Enright, Patterson; second, Helen Gwinn, Swan; third, Geo. A. Schurk, Ft. Madison. Ben Davis—First, Geo. A. Schurk, Ft. Madison; second, Thos. Enright, Patterson; third, A. R. Soder, Hartford. Willow Twig—First, A. R. Soder, Hartford; second, Geo. A. Schurk, Ft. Madison; third, Lena E. Gwinn, Swan. Minkler—First, A. R.

Soder, Hartford; second, J. A. McFerrin, Indianola; third, Thos. Enright, Patterson. Winesap—First, Thos. Enright, Patterson; second, J. A. McFerrin, Indianola; third, Helen Gwinn, Swan. Lowell—First, J. A. McFerrin, Indianola; second, Lena E. Gwinn, Swan; third, W. E. Utterback, Sigourney. Northwestern Greening—First, Thos. Enright, Patterson; second, J. A. McFerrin, Indianola; third, W. E. Utterback, Sigourney. Delicious—First, Thos. Enright, Patterson; second, J. A. McFerrin, Indianola; third, A. R. Soder, Hartford. Wealthy—First, Thos. Enright, Patterson; second, A. R. Soder, Hartford; third, Lena E. Gwinn, Swan. McMahon—First, Geo. A. Schurk, Ft. Madison; second, Lena E. Gwinn, Swan; third, J. F. Wellons, Indianola. Dyer—First, Thos. Enright, Patterson; second, A. R. Soder, Hartford. Price's Sweet—First, A. R. Soder, Hartford; second, J. F. Wellons, Indianola; third, Helen Gwinn, Swan. Janet—First, A. R. Soder, Hartford; second, W. E. Utterback, Sigourney; third, Thos. Enright, Patterson. Ten Varieties—Optional—Cole's Quince—First, Thos. Enright, Patterson; second, Geo. A. Schurk, Ft. Madison; third, A. R. Soder, Hartford. Mann—First, A. R. Soder, Hartford; second, J. F. Wellons, Indianola; third, Thos. Enright, Patterson. Sheriff—First, Thos. Enright, Patterson; second Helen Gwinn, Swan; third, Lena E. Gwinn, Swan. Northern Spy—First, A. R. Soder, Hartford; second, Geo. A. Schurk, Ft. Madison; third, Helen Gwinn, Swan. St. Lawrence—First, Geo. A. Schurk, Ft. Madison; second, Helen Gwinn, Swan; third, Lena E. Gwinn, Swan. Flora Bell—First, J. F. Bennett, Tabor; second, Helen Gwinn, Swan: third, Thos. Enright, Patterson. Permain—First, Thos. Enright, Patterson; second, Helen Gwinn, Swan; third, J. F. McKee & Son, Carlisle. Winter Banana—First, J. F. Bennett, Tabor; second, Geo. A. Schurk, Ft. Madison; third, A. R. Soder, Hartford. Russett—First, J. A. McFerrin, Indianola; second, Helen Gwinn, Swan; third, Thos. Enright, Patterson. Summer Apple—First, Geo. A. Schurk, Ft. Madison; second, J. F. Wellons, Indianola; third, Thos. Enright, Patterson.

TWENTY-FIVE PLATE DISPLAY.

JUDGES.. { H. E. NICHOLS
W. J. KOCKEN

Northern District—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah.

Central District—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin.

Capital District—First, Apple Grove Orchards, Mitchellville; second, C. O. Garrett, Des Moines; third, Cyrus E. Harvey, Altoona.

Southern District—First, Thos. Enright, Patterson; second, A. R. Soder, Hartford; third, J. A. McFerrin, Indianola; fourth, J. F. Bennett, Tabor; fifth, Geo. A. Schurk, Ft. Madison; sixth, Helen Gwinn, Swan.

CRABS.

JUDGE..F. M. HARRINGTON

NORTHERN DISTRICT.

Whitney—First, Isaac Johnson, West Union; second, P. M. Peterson, Cherokee; third, O. O. Lomen, Decorah. Hyslop—First, Isaac Johnson, West Union; second, P. M. Peterson, Cherokee. Martha—First, O. O. Lomen, Decorah; second, P. M. Peterson, Cherokee; third, Isaac Johnson, West Union. Transcendent—First, Isaac Johnson, West Union; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee. Yellow Siberian—First, O. O. Lomen, Decorah; second, P. M. Peterson, Cherokee. Briars Sweet—First, C. H. True, Edgewood; second, P. M. Peterson, Cherokee; third, Isaac Johnson, West Union. Selected—First, C. H. True, Edgewood; second, Isaac Johnson, West Union; third, P. M. Peterson, Cherokee. Selected—First, C. H.

True, Edgewood; second, O. O. Lomen, Decorah; third, P. M. Peterson, Cherokee.

CENTRAL DISTRICT.

Whitney—First, Robert Collins, Liscomb; second, Orchard Developing Club, Legrand; third, F. O. Harrington, Williamsburg. Hyslop—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Martha—First, Orchard Developing Club, Legrand; second, E. O. Worth, Mondamin; third, M. J. Worth, Mondamin. Transcendent—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Yellow Siberian—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Briars Sweet—First, M. J. Worth, Mondamin; second, Orchard Developing Club, Legrand; third, E. O. Worth, Mondamin. Selected—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin; third, Orchard Developing Club, Legrand. Selected—First, F. O. Harrington, Williamsburg; second, E. O. Worth, Mondamin; third, M. J. Worth, Mondamin.

CAPITAL DISTRICT.

Whitney—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, M. J. Craig, Mitchellville. Hyslop—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona; third, Walter Russell, Indianola. Martha—First, Cyrus E. Harvey, Altoona; second, Walter Russell, Indianola. Transcendent—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, Walter Russell, Indianola. Yellow Siberian—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Briars Sweet—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Selected—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines.

SOUTHERN DISTRICT.

Whitney—First, Thos. Enright, Patterson; second, A. R. Soder, Hartford; third, Helen Gwinn, Swan. Hyslop—First, Thos. Enright, Patterson; second, J. A. McFerrin, Indianola. Martha—First, J. F. Wellons, Indianola; second, Thos. Enright, Patterson. Transcendent—First, Thos. Enright, Patterson. Yellow Siberian—First, Thos. Enright, Patterson. Briars Sweet—First, Thos. Enright, Patterson. Optional—First, Thos. Enright, Patterson; second, J. F. Wellons, Indianola. Optional—Thos. Enright, Patterson.

NATIVE OR HYBRID CRAB.

Northern District—First, O. O. Lomen, Decorah; second, E. M. Reeves, Waverly; third, C. H. True, Edgewood.

Central District—First, F. O. Harrington, Williamsburg.

Capital District—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines.

Southern District—First, J. F. Wellons, Indianola; second, A. R. Soder, Hartford.

TEN PLATE DISPLAY.

JUDGES.................................... { W. J. KOCKEN
H. E. NICHOLS

Wealthy—First, Apple Grove Orchards, Mitchellville; second, C. O. Garrett, Des Moines; third, Cyrus E. Harvey, Altoona; fourth, J. A. McFerrin, Indianola; fifth, O. O. Lomen, Decorah.

Best Ten Plate Exhibit Each of Three Other Varieties, to Be Selected—Jonathan—First, Apple Grove Orchards, Mitchellville; second, E. O. Worth, Mondamin; third, Cyrus E. Harvey, Altoona; fourth, Geo. A. Schurk, Ft.

Madison; fifth, C. O. Garrett, Des Moines; sixth, M. J. Worth, Mondamin. Grimes Golden—First, Geo. A. Schurk, Ft. Madison; second, Apple Grove Orchards, Mitchellville; third, M. J. Worth, Mondamin; fourth, C. O. Garrett, Des Moines; fifth, A. R. Soder, Hartford; sixth, J. A. McFerrin, Indianola. Other Varieties—First, Apple Grove Orchards, Mitchellville; second, Cyrus E. Harvey, Altoona; third, C. O. Garrett, Des Moines; fourth, J. A. McFerrin, Indianola; fifth, Geo. A. Schurk, Ft. Madison.

Premiums on Each Variety—Duchess—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, C. O. Garrett, Des Moines; fourth, Geo. A. Schurk, Ft. Madison; fifth, Cyrus E. Harvey, Altoona. Wealthy—First, E. O. Worth, Mondamin; second, C. O. Garrett, Des Moines; third, Cyrus E. Harvey, Altoona; fourth, Apple Grove Orchards, Mitchellville; fifth, Thos. Enright, Patterson. Jonathan—First, M. J. Worth, Mondamin; second, C. O. Garrett, Des Moines; third, E. O. Worth, Mondamin; fourth, Thos. Enright, Patterson. Grimes—First, A. R. Soder, Hartford; second, Apple Grove Orchards, Mitchellville; third, Geo. A. Schurk, Ft. Madison; fourth, C. O. Garrett, Des Moines; fifth, Cyrus E. Harvey, Altoona. Delicious—First, Thos. Enright, Patterson; second, J. A. McFerrin, Indianola; third, Cyrus E. Harvey, Altoona; fourth, Geo. A. Schurz, Ft. Madison; fifth, C. O. Garrett, Des Moines. Stayman—First, Cyrus E. Harvey, Altoona; second, M. J. Worth, Mondamin; third, Geo. A. Schurk, Ft. Madison; fourth, A. R. Soder, Hartford. Ben Davis—First, Apple Grove Orchards, Mitchellville; second, Geo. F. Schurk, Ft. Madison; third, Thos. Enright, Patterson, fourth, M. J. Worth, Mondamin; fifth, E. O. Worth, Mondamin. Northwestern Greening—First, Apple Grove Orchards, Mitchellville; second, E. O. Worth, Mondamin; third, Cyrus E. Harvey, Altoona; fourth, M. J. Worth, Mondamin. Optional—First, Apple Grove Orchards, Mitchellville; second, M. J. Worth, Mondamin; third, E. O. Worth, Mondamin; fourth, Cyrus E. Harvey, Altoona; fifth, Orchard Developing Club, Legrand. Optional—First, C. O. Garrett, Des Moines; second, Apple Grove Orchards, Mitchellville; third, A. R. Soder, Hartford; fourth, Geo. A. Schurk, Ft. Madison; fifth, Orchard Developing Club, Legrand.

DISPLAY OF FRUITS.

JUDGE...W. J. KOCKEN

General Collection—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, E. O. Worth, Mondamin; fourth, J. A. McFarrin, Indianola; fifth, M. J. Worth, Mondamin; sixth, Thos. Enright, Patterson; seveneth, C. H. True, Edgewood; eighth, A. R. Soder, Hartford; ninth, O. O. Lomen, Decorah; tenth, J. F. Wellons, Indianola; eleventh, Walter Russell, Indianola.

ORNAMENTAL DESIGNS IN FRUIT.

JUDGES..{ H. E. NICHOLS
F. M. HARRINGTON

For the Best and Most Artistic Basket of Fruit, Premium Money to Be Pro Rated Among All Scoring Above 60 Per Cent—First, C. O. Garrett, Des Moines; second, E. M. Garrett, Des Moines; third, Mrs. Frank Stuart, Des Moines; fourth, C. W. Harvey, Altoona; fifth, Hazel Plummer, Des Moines; sixth, F. E. Heilman, Ft. Dodge; seventh, Cyrus E. Harvey, Altoona; eighth, Walter Russell, Indianola; ninth, O. A. Decker, Des Moines; tenth, Fern Justice, Ankeny; eleventh, A. W. Johnson, Des Moines; twelfth, Helen Gwinn, Swan; thirteenth, J. F. Wellons, Indianola.

GIFT BASKETS.

For the Best and Most Artistic Basket or Box of Fruit and Other Edible Material, Premium Money to Be Pro Rated Among Those Scoring 60 Per Cent or Above—First, Mrs. Frank Stuart, Des Moines; second, E. M. Garrett, Des Moines; third, E. M. Reeves, Waverly; fourth, J. F. Wellons, Indianola; fifth, C. O. Garrett, Des Moines; sixth, Hazel Plummer, Des Moines; seventh, C. W. Harvey, Altoona; eighth, J. U. Walker, Swan; ninth, Mrs. S. W. Barrett, Mitchellville; tenth, F. E. Heilman, Ft. Dodge; eleventh, Walter Russell, Indianola; twelfth, J. A. McFerrin, Indianola; thirteenth, Cyrus E. Harvey, Altoona; fourteenth, Mrs. Mahlon Gerhart, Des Moines.

PEARS.

JUDGE..R. S. HERRICK

Collection of Pears Not Less Than 15 Varieties—First, E. O. Worth, Mondamin; second, C. O. Garrett, Des Moines; third, J. F. Wellons, Indianola.

Plates, Any Worthy Variety (Premiums Limited to 15 Varieties)—Keefer—First, Geo. A. Schurk, Ft. Madison; second, Wm. Wolf, Grimes. Bartlett—First, Geo. A. Schurk, Ft. Madison; second, M. J. Worth, Mondamin. Garber—First, Geo. A. Schurk, Ft. Madison; second, F. O. Harrington, Willamisburg. Sickle—First, J. F. Wellons, Indianola; second, Geo. F. Schurk, Ft. Madison. Flemish Beauty—First, J. H. Buchanan, Adel; second, E. M. Reeves, Waverly. Sheldon—E. O. Worth, Mondamin; second, M. J. Worth, Mondamin. Duchess—First, J F. Wellons, Indianola; second, J. F. McFerrin, Indianola. Suduth—First, M. J. Worth, Mondamin; second, E. M. Reeves, Waverly. Howell—First, Geo. A. Schurk, Ft. Madison; second, C. O. Garrett, Des Moines. Vermont Beauty—First, M. J. Worth, Mondamin; second, C. O. Garrett, Des Moines. Hartford—First, J. F. Wellons, Indianola; second, C. O. Garrett, Des Moines. Bartlett Sickle—First, Geo. A. Schurk, Ft. Madison; second, E. M. Reeves, Waverly. Beesinianka—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines. Lapp's Favorite—First, C. O. Garrett, Des Moines. Louis Bond—First, T. J. Brown, Pleasantville; second, C. O. Garrett, Des Moines..

Best Seedling Pear If Worthy—First, J. F. Wellons, Indianola.

Largest and Best Collection Per Plate, Distinct Varieties—First, E. O. Worth, Mondamin; second, C. O. Garrett, Des Moines.

PEACHES.

JUDGE..W. J. KOCKEN

SOUTHERN DISTRICT.

Collection of Peaches, Not Less Than Five Varieties—First, Cyrus E. Harvey, Altoona; second, J. F. Wellons, Indianola.

Plates, Worthy Varieties. (Premiums limited to five varieties. Seedlings may be entered, but must be of recognized value.) Seedlings—First, C. O. Garrett, Des Moines; second, J. H. Comer, Des Moines. Iron Clad—First, J. W. Pearson, Mitchellville; second, Cyrus E. Harvey, Altoona. Worthy—First, Cyrus E. Harvey, Altoona; second, Geo. A. Schurk, Ft. Madison. Balie Alberta—First, M. J. Craig, Mitchellville; second, Geo. A. Schurk, Ft. Madison. Champion—First, M. J. Worth, Mondamin; second, E. O. Worth, Mondamin.

GRAPES.

JUDGE................................C. V. HOLSINGER, Ames

NORTHERN DISTRICT.

Best and Largest Collection of Grapes, Four Bunches to Plate—First, C. H. True, Edgewood.

Concord—First, C. H. True, Edgewood; second, A. W. Taylor, Pleasantville.

Worden—First, C. H. True, Edgewood; second, N. F. Ambrose, Roland.

Delaware—First, C. H. True, Edgewood.

Wyoming Red—First, C. H. True, Edgewood.

Moore's Early—First, C. H. True, Edgewood.

Four Bunches of Grapes of Varieties Not Named Above, Premiums Limited to Five Varieties—Lutie—First, C. H. True, Edgewood. Jessica—First, C. H. True, Edgewood. Goethe—First, C. H. True, Edgewood.

Best and Largest Collection of Grapes, Four Bunches to Plate—First, C. O. Garrett, Des Moines; second, John C. Hol, Des Moines; third, Cyrus E. Harvey, Altoona.

Campbell's Early—First, A. R. Soder, Hartford.

Pockington—First, J. F. Wellons, Indianola; second, Cyrus E. Harvey, Altoona.

Concord—First, Karl Eilbert, Des Moines; second, W. M. Riley, Patterson.

Worden—First, John C. Hol, Des Moines; second, W. M. Riley, Patterson.

Delaware—First, C. O. Garrett, Des Moines; second, John C. Hol, Des Mointh.

Eaton—First, John E. Flaskerud, Saude.

Woodruff Red—First, C. O. Garrett, Des Moines.

Wyoming Red—First, C. O. Garrett, Des Moines; second, J. F. Wellons, Indianola.

Moore's Early—First, C. O. Garrett, Des Moines; second, Mrs. Ella Plummer, Des Moines.

Moore's Diamond—First, F. O. Harrington, Williamsburg; second, John C. Hol, Des Moines.

Niagara—First, C. O. Garrett, Des Moines; second, J. H. Comer, Des Moines.

Agawan—First, C. O. Garrett, Des Moines; second, John C. Hol, Des Moines.

Brighton—First, F. O. Harrington, Williamsburg; second, J. W. Pearson, Mitchellville.

Four Bunches of Grapes of Varieties Not Named Above, Premiums Limited to Five Varieties—Elvira—First, C. O. Garrett, Des Moines; second, W. M. Riley, Patterson. Hartford—First, John C. Hol, Des Moines; second, C. O. Garrett, Des Moines. Delicious—First, F. O. Harrington, Williamsburg; second, C. O. Garrett, Des Moines. Lucile—First, C. O. Garrett, Des Moines; second, F. O. Harrington, Williamsburg.

Four Bunches Most Promising New Seedling Grape, If Deemed Worthy—First, J. F. Wellons, Indianola; second, A. R. Soder, Hartford.

PLUMS.

NORTHERN DISTRICT.

JUDGES.................................... { F. M. HARRINGTON
H. E. NICHOLS

Largest and Best Exhibit of Plums, Not Less Than 15 Varieties—First, Isaac Johnson, West Union; second, O. O. Lomen, Decorah; third, E. M. Reeves, Waverly.

Plates De Soto—First, Isaac Johnson, West Union; second, O. O. Lomen, Decorah.

Plates Forest Garden—First, E. M. Reeves, Waverly; second, C. H. True, Edgewood.

Plates Hawkeye—First, O. O. Lomen, Decorah; second, E. M. Reeves, Waverly.

Plates Wolf—First, E. M. Reeves, Waverly; second, Isaac Johnson, West Union.

Plates Wyant—First, E. M. Reeves, Waverly; second, O. O. Lomen, Decorah.

Plates Stoddard—First, Isaac Johnson, West Union; second, E. M. Reeves, Waverly.

Plates Miner—First, E. M. Reeves, Waverly; second, O. O. Lomen, Decorah.

Plates Wild Goose—First, O. O. Lomen, Decorah.

Plates Hunt—First, Isaac Johnson, West Union; second, E. M. Reeves, Waverly.

Plates Surprise—First, C. H. True, Edgewood; second, E. M. Reeves, Waverly.

Plates Terry—First, E. M. Reeves, Waverly; second, Isaac Johnson, West Union.

Plates Lombard—First, Isaac Johnson, West Union; second, O. O. Lomen, Decorah.

Best Plate Domestic Plums—First, C. H. True, Edgewood; second, O. O. Lomen, Decorah.

Best Plate Not Named on List Not Exceeding Five Varieties, Each Plate—Bixby—First, C. H. True, Edgewood; second, E. M. Reeves, Waverly. Minisota—First, O. O. Lomen, Decorah; second, Isaac Johnson, West Union. Emerald—First, E. M. Reeves, Waverly; second, Isaac Johnson, West Union. Glenwood—First, O. O. Lomen, Decorah; second, E. M. Reeves, Waverly.

Best Exhibit Domestic Plums, Not Less Than Five Varieties—First, O. O. Lomen, Decorah.

Best Plate Japan or Hybrid Plums, Not Entered in Collections—First, E. M. Reeves, Waverly; second, Isaac Johnson, West Union.

SOUTHERN DISTRICT.

JUDGE..R. S. HERRICK

Largest and Best Exhibit of Plums, Not Less Than Fifteen Varieties—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines; third, J. F. Wellons, Indianola.

Plates De Soto—First, J. F. Wellons, Indianola; second, C. O. Garrett, Des Moines.

Plates Forest Garden—First, C. O. Garrett, Des Moines; second, J. A. McFerrin, Indianola.

Plates Hawkeye—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines.

Plates Wolf—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines.

Plates Wyant—First, Cyrus E. Harvey, Altoona; second, M. J. Craig, Mitchellville.

Plates Stoddard—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona.

Plates Miner—First, Cyrus E. Harvey, Altoona; second, A. R. Soder, Hartford.

Plates Wild Goose—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona.

Plates Hunt—First, C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona.

Plates Surprise—First, C. O. Garrett, Des Moines; second, J. A. McFerrin, Indianola.

Plates Terry—First, J. F. McKee & Son, Carlisle; second, F. O. Harrington, Williamsburg.

Plates Lombard—First, J. W. Pearson, Mitchellville; second, Cyrus E. Harvey, Algona.

Best Plate Domestic Plums—First, J. W. Pearson, Mitchellville; second, F. O. Harrington, Williamsburg.

Best Plate Not Named on List Not Exceeding Five Varieties, Each Plate—First, J. W. Pearson, Mitchellville; second, C. O. Garrett, Des Moines. First—C. O. Garrett, Des Moines; second, Cyrus E. Harvey, Altoona. First, F. O. Harrington, Williamsburg; second, Cyrus E. Harvey, Altoona. First, M. J. Craig, Mitchellville; second, J. W. Pearson, Mitchellville. First—Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines.

Best Exhibit Domestic Plums, Not Less Than Five Varieties—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines.

Best Exhibit Japan Plums, Not Less Than Three Varieties—First, Cyrus E. Harvey, Altoona; second, C. O. Garrett, Des Moines.

Best Plate Japan or Hybrid Plums, Not Entered in Collection—First, Cyrus E. Harvey, Altoona; second, Apple Grove Orchards, Mitchellville.

Native Plum Seedlings—First, A. R. Soder, Hartford; second, J. W. Pearson, Mitchellville; third, C. O. Garrett, Des Moines; fourth, C. O. Garrett, Des Moines.

NATIVE FRUITS.

JUDGES.. { H. E. NICHOLS
W. J. KOCKEN

Plates Elderberry—First, S. A. Carpenter, Malcolm; second, A. R. Soder, Hartford.

Plates High Bush Cranberry—First, E. M. Reeves, Waverly.

Plates Fresh Strawberry, Progressive—First, J. F. Wellons, Indianola.

Plates Fresh Strawberry, Other Variety—First, J. M. Henderson, Des Moines.

Plates of Each Other Native Fruit—Wild Grapes—First, J. F. Wellons, Indianola; second, A. R. Soder, Hartford. May Apple—First, C. O. Garrett, Des Moines; second, S. D. Whinery, Des Moines; Black Haws—First, S. D. Whinery, Des Moines; second, J. F. Wellons, Indianola. Choke Cherries—First, S. D. Whinery, Des Moines; second, C. O. Garrett, Des Moines. Black Berries—First, S. D. Whinery, Des Moines. Dew Berries—First, S. D. Whinery, Des Moines.

Best Collection of Native Fruits—First, S. D. Whinery, Des Moines; second, J. F. Wellons, Indianola; third, Cyrus E. Harvey, Altoona.

EDIBLE NUTS GROWN IN IOWA.

Native or Foreign Origin.

JUDGE..F. M. HARRINGTON

Plates Black Walnut—First, A. R. Soder, Hartford; second, N. F. Ambrose, Roland.

Plates White Walnut or Butternut—First, W. E. Utterback, Sigourney; second, Mrs. S. W. Barrett, Mitchellville.

Plates Shell Bark Hickory Nut—First, S. D. Whinery, Des Moines; second, W. J. Porter, Ankeny.

Plats Hazel Nut—First, W. J. Porter, Ankeny; second, S. D. Whinery, Des Moines.

Plates Sweet Chestnut—First, J. W. Pearson, Mitchellville; second, Cyrus E. Harvey, Altoona.

Plates Peanuts—First, F. L. Reinhard & Son, Ottumwa; second, Mrs. Ella Plummer, Des Moines.

Plates Each Other Nut Grown in Iowa—First, J. W. Pearson, Mitchellville; second, J. R. Griffieon, Mitchellville.

Best Collection of Nuts—First, J. F. Wellons, Indianola; second, C. O. Garrett, Des Moines.

FLORICULTURE.

SUPERINTENDENT..............................ART H. SMITH, Boone

JUDGE...JOHN REARIDON, Ames

PROFESSIONAL LIST, PLANTS IN POTS.

Collection of Plants in Bloom, Not Less Than 25 Varieties—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Collection of Foliage or Decorative Plants, Not Less Than 20 Varieties, Excluding Palms and Ferns—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines.

Collection of Palms—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines; fourth, Kirkwood Floral Company, Des Moines.

Collection of Ferns—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines; fourth, Kirkwood Floral Company, Des Moines.

Collection of Coleus—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines.

Collection of Geraniums—First, Iowa Seed Company, Des Moines; second, Kirkwood Floral Company, Des Moines.

Collection of Flowering Begonias—First, Iowa Seed Company, Des Moines; second, Kirkwood Floral Company, Des Moines.

Collection of Rex Begonias—First, Iowa Seed Company, Des Moines.

Collection of Fancy Leaved Caladium—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines.

Collection of Crotons—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines.

Collection of Cannas—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines.

Specimens of Areca Lutescens—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines.

Specimen Kentia Belmoreana—First, Iowa Seed Company, Des Moines; second, Kirkwood Floral Company, Des Moines; third, Wilson Floral Company, Des Moines.

Specimen Kentia Fosterina—First, Wilson Floral Company, Des Moines; second, Iowa Seed Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Specimen Phoenix Canariensis—First, Wilson Floral Company, Des Moines; second, Alpha Floral Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Specimen Phoenix Roebelenii—First, Wilson Floral Company, Des Moines; second, Alpha Floral Company, Des Moines; third, Iowa Seed Company, Des Moines.

Specimen of Any Other Variety of Palm—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines.

Specimen Cycas Revoluta—First, Iowa Seed Company, Des Moines; second, Alpha Floral Company, Des Moines; third, Wilson Floral Company, Des Moines.

Specimen Araucaria—First, Wilson Floral Company, Des Moines; second, Alpha Floral Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Specimen Dracaena—First, Wilson Floral Company, Des Moines; second, Iowa Seed Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Specimen Nephrolepsis Bostoniensis—First, Wilson Floral Company, Des Moines; second, Iowa Seed Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Specimen Nephrolepsis Whitmanii—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines.

Specimen of Any Other Variety of Fern—First, Wilson Floral Company, Des Moines; second, Iowa Seed Company, Des Moines; third, Alpha Floral Company, Des Moines.

Specimen Asparagus Sprengeri—First, Wilson Floral Company, Des Moines; second, Iowa Seed Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Vase of Plants—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Kirkwood Floral Company, Des Moines.

Basket of Plants—First, Kirkwood Floral Company, Des Moines; second, Iowa Seed Company, Des Moines; third, Alpha Floral Company, Des Moines.

FLORAL DESIGNS AND CUT FLOWERS.

JUDGE..JAMES L. D. ENMEAD

Display of Cut Flowers—First, Wilson Floral Company, Des Moines; second, Iowa Seed Company, Des Moines; third, Alpha Floral Company, Des Moines; fourth, Flower Shop, Des Moines.

Display of Gladioli—First, Chas. J. Siemer, Nora Springs; second, Geo. S. Woodruff, Independence; third, W. M. Hestor, Des Moines; fourth, Iowa Seed Company, Des Moines.

Fifty Red Carnations—First, Alpha Floral Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Lozier Florist, Des Moines.

Fifty Pink Carnations—First, Wilson Floral Company, Des Moines; second, Alpha Floral Company, Des Moines; third, Lozier Florist, Des Moines.

Fifty White Carnations—First, Wilson Floral Company, Des Moines; second, Alfred Lozier, Des Moines; third, Lozier Florist, Des Moines.

Wreath of Flowers, Frame Not to Exceed 24 Inches, on Easel—First, Wilson Floral Company, Des Moines; second, Lozier Florist, Des Moines; third, Alpha Floral Company, Des Moines; fourth, Flower Shop, Des Moines.

Single Spray of Flowers—First, Flower Shop, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines.

Display of Asters—First, Iowa Seed Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Lozier Florist, Des Moines.

Floral Design (Wreath Excluded)—First, Alpha Floral Company, Des Moines; second, Lozier Florist, Des Moines; third, Flower Shop, Des Moines; fourth, Wilson Floral Company, Des Moines.

Twelve Spike Gladiolus, Pink—First, Geo. S. Woodruff, Independence; second, Chas. J. Siemer, Nora Springs; third, W. M. Hestor, Des Moines.

Twelve Spike Augusta, White—First, Chas. J. Siemer, Nora Springs; second, Geo. S. Woodruff, Independence; third, W. M. Hestor, Des Moines.

Twelve Spike Mrs. Frances King, Red—First, W. M. Hestor, Des Moines; second, Geo. S. Woodruff, Independence; third, Chas. J. Siemer, Nora Springs.

Twelve Spike Yellow Gladiolus—First, Geo. S. Woodruff, Independence; second, W. M. Hestor, Des Moines; third, Chas. J. Siemer, Nora Springs.

Twelve Spikes Any Other Variety—First, W. M. Hestor, Des Moines; second, Chas. J. Siemer, Nora Springs; third, Geo. S. Woodruff, Independence.

TABLE DECORATIONS FOR A DINNER WITH COVERS FOR SIX.

First, Flower Shop, Des Moines; second, Alpha Floral Company, Des Moines; third, Wilson Floral Company, Des Moines; fourth, Lozier Florist, Des Moines.

Twelve American Beauty Roses—First, Wilson Floral Company, Des Moines; second, Alpha Floral Company, Des Moines; third, Flower Shop, Des Moines.

Twenty-five Mrs. Charles Russell—First, Wilson Floral Company, Des Moines; second, Flower Shop, Des Moines; third, Alpha Floral Company, Des Moines.

Twenty-five Mrs. Aaron Ward—First, Alpha Floral Company, Des Moines; second, Flower Shop, Des Moines; third, Wilson Floral Company, Des Moines.

Twenty-five Sunburst—First, Flower Shop, Des Moines; second, Alpha Floral Company, Des Moines; third, Wilson Floral Company, Des Moines.

Twenty-five Red Roses—First, Alpha Floral Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Flower Shop, Des Moines.

Twenty-five Pink Roses—First, Wilson Floral Company, Des Moines; second, Alpha Floral Company, Des Moines; third, Flower Shop, Des Moines.

Twenty-five White Roses—First, Alpha Floral Company, Des Moines; second, Flower Shop, Des Moines; third, Wilson Floral Company, Des Moines.

Twenty-five Roses Any Other Color—First, Alpha Floral Company, Des Moines; second, Flower Shop, Des Moines; third, Wilson Floral Company, Des Moines.

Basket Assorted Flowers—First, Alpha Floral Company, Des Moines; second, Flower Shop, Des Moines; third, Wilson Floral Company, Des Moines.

Bride's Boquet—First, Flower Shop, Des Moines; second, Wilson Floral Company, Des Moines; third, Alpha Floral Company, Des Moines.

Corsage Boquet—First, Wilson Floral Company, Des Moines; second, Flower Shop, Des Moines; third, Alpha Floral Company, Des Moines.

Vase Assorted Flowers—First, Alpha Floral Company, Des Moines; second, Wilson Floral Company, Des Moines; third, Flower Shop, Des Moines.

AMATEUR LIST, PLANTS IN POTS.

JUDGE....................................JOHN REARDON, Ames

Collection of Plants Arranged for Effect, Not Less Than 20 Varieties—First, Mrs. M. Bredimus, Des Moines; second, Mrs. Mahlon Gerhart, Des Moines; third, Cyrus E. Harvey, Altoona.

Collection of Ferns—First, Mrs. M. Bredimus, Des Moines; second, Mrs. Mahlon Gerhart, Des Moines.

Collection of Agaves, Cactus and Succelents—First, Mrs. M. Bredimus, Des Moines.

Collection of Begonias—First, Mrs. M. Bredimus, Des Moines; second, Cyrus E. Harvey, Altoona.

Collection of Coleus—First, Cyrus E. Harvey, Altoona; second, Mrs. Mahlon Gerhart, Des Moines; third, Mrs. M. Bredimus, Des Moines.

Collection of Geraniums—First, Mrs. Gertie Englebrecht, Valley Junction; second, Cyrus E. Harvey, Altoona; third, Mrs. M. Bredimus, Des Moines.

Collection of Abutilons—First, Mrs. M. Bredimus, Des Moines.

Collection of Fuchias—First, Mrs. M. Bredimus, Des Moines; second, Cyrus E. Harvey, Altoona.

Collection of Cannas—First, Mrs. M. Bredimus, Des Moines; second, Wm. Green, Morgan, Minn.

Specimen Foliage Plant—First, Mrs. M. Bredimus, Des Moines; second, Wm. Green, Morgan, Minn; third, Cyrus E. Harvey, Altoona.

Specimen Lantana—First, Mrs. M. Bredimus, Des Moines.

Specimen Flowering Begonia—First, Cyrus E. Harvey, Altoona; second, Mrs. M. Bredimus, Des Moines; third, Anna E. Shettle, Des Moines.

Specimen Geranium—First, Mrs. J. E. Grant, Carlisle; second, Mrs. Fred Meachem, Adelphi.

Specimen Fern—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. M. Bredimus, Des Moines; third, O. F. Porter, Ankeny.

Specimen Abutilon—First, Mrs. M. Bredimus, Des Moines; second, Cyrus E. Harvey, Altoona.

Specimen Asparagus Sprengeri—First, Mr. and Mrs. Frank Harris, Des Moines; second, Mrs. P. S. Brunk, Altoona; third, Mrs. M. Bredimus, Des Moines.

Specimen Any Plant in Bloom—First, Cyrus E. Harvey, Altoona; second, Mrs. M. Bredimus, Des Moines.

Vase of Plants—First, Miss Jane Collins, Bondurant; second, Mrs. M. Bredimus, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Basket of Plants—First, Mrs. A. P. Stewellyn, Waukee; second, Miss Jane Collins, Bondurant; third, Mrs. Mahlon Gerhart, Des Moines.

AMATEUR LIST, CUT FLOWERS.

JUDGE....................................JAMES L. D. ENMEAD

Display of Cut Flowers—First, Mrs. Mahlon Gerhart, Des Moines; second, Miss Jane Collins, Bondurant; third, Mrs. M. Bredimus, Des Moines; fourth, Cyrus E. Harvey, Altoona; fifth, Mrs. Andrew Conn, Newton.

Display of Zinnias—First, Mrs. A. P. Stewellyn, Waukee; second, Cyrus E. Harvey, Altoona; third, Mrs. Mahlon Gerhart, Des Moines.

Display of Salpiglossis—First, Mrs. M. Bredimus, Des Moines; second, Mrs. Mahlon Gerhart, Des Moines.

Display of Petunias—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. M. Bredimus, Des Moines; third, Cyrus E. Harvey, Altoona.

Display of Calliopsis—First, Anna E. Shettle, Des Moines; second, Mrs. M. Bredimus, Des Moines; third, Cyrus E. Harvey, Altoona.

Display of Ornamental Grasses—First, Mrs. M. Bredimus, Des Moines; second, Mrs. A. P. Stewellyn, Waukee; third, Gustafson Bros., Lanyon.

Display of Gladioli—First, E. R. Beebe, Mitchellville; second, Mrs. M. Bredimus, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Six Spikes Scarlet Gladioli—First, Mrs. M. Bredimus, Des Moines; second, Mrs. Mahlon Gerhart, Des Moines; third, S. A. Carpenter, Malcolm.

Six Spikes Pink Gladioli—First, E. R. Beebe, Mitchellville; second, Cyrus E. Harvey, Altoona; third, Mrs. Mahlon Gerhart, Des Moines.

Six Spikes White Gladioli—First, E. R. Beebe, Mitchellville; second, Mrs. Mahlon Gerhart, Des Moines.

Six Spikes Any Other Color—First, E. R. Beebe, Mitchellville; second, Mrs. M. Bredimus, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Display of Asters—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. Andrew Conn, Newton; third, Alice B. Cross, Des Moines; fourth, S. A. Carpenter, Malcolm.

Display of Dianthus—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. Andrew Conn, Newton; third, Anna E. Shettle, Des Moines; fourth, Mrs. A. P. Stewellyn, Waukee.

Display of Marigolds—First, Cyrus E. Harvey, Altoona; second, Mrs. A. P. Stewellyn, Waukee; third, Miss Jane Collins, Bondurant; fourth, Mrs. M. Bredimus, Des Moines.

Display of Dahlias—First, Mrs. A. P. Stewellyn, Waukee; second, Mrs. Andrew Conn, Newton; third, Cyrus E. Harvey, Altoona; fourth, Anna E. Shettle, Des Moines.

Display of Phlox—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. M. Bredimus, Des Moines; third, Mrs. A. P. Stewellyn, Waukee; fourth, Cyrus E. Harvey, Altoona.

Display of Geraniums—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. A. P. Stewellyn, Waukee; third, Cyrus E. Harvey, Altoona.

Display of Verbenas—First, L. C. Balsom, Decorah; second, S. A. Carpenter, Malcolm; third, Anna E. Shettle, Des Moines.

Display of Snapdragons—First, Mrs. Mahlon Gerhart, Des Moines; second, L. C. Balsom, Decorah; third, Anna E. Shettle, Des Moines.

Display of Nasturtiums—First, Anna E. Shettle, Des Moines; second, Miss Jane Collins, Bondurant; third, Alfred Lozier, Des Moines.

Display of Larkspurs—First, Mrs. Mahlon Gerhart, Des Moines; second, Miss Jane Collins, Bondurant; third, Mrs. M. Bredimus, Des Moines.

Display of Cornflowers—First, L. C. Balsom, Decorah; second, Mrs. M. Bredimus, Des Moines; third, Cyrus E. Harvey, Altoona.

Display of Balsams—First, Mrs. A. P. Stewellyn, Waukee; second, Mrs. T. J. Flora, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Display of Sweet Peas—First, Mrs. A. P. Stewellyn, Waukee; second, Mrs. T. J. Flora, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Display of Cosmos—First, Cyrus E. Harvey, Altoona; second, Mrs. M. Bredimus, Des Moines; third, Miss Jane Collins, Bondurant.

Display of Pansies—First, Miss Jane Collins, Bondurant; second, S. A. Carpenter, Malcolm; third, Sadie M. Crane, Des Moines.

Display of Scabiosa—First, Mrs. M. Bredimus, Des Moines; second, Mrs. A. P. Stewellyn, Waukee; third, Mrs. Mahlon Gerhart, Des Moines.

Display of Gaillardias—First, Miss Jane Collins, Bondurant; second, Anna E. Shettle, Des Moines; third, Mrs. M. Bredimus, Des Moines.

Basket of Cut Flowers—First, Mrs. Mahlon Gerhart, Des Moines; second, Miss Jane Collins, Bondurant; third, Mrs. Andrew Conn, Newton; fourth, Mrs. A. P. Stewellyn, Waukee.

Boquet—First, Mrs. Mahlon Gerhart, Des Moines; second, Miss Jane Collins, Bondurant; third, Anna E. Shettle, Des Moines; fourth, Mrs. A. P. Stewellyn, Waukee.

Vase of Cut Flowers—First, Mrs. M. Bredimus, Des Moines; second, Anna E. Shettle, Des Moines; third, Mrs. T. J. Flora, Des Moines; fourth, Miss Jane Collins, Bondurant.

TEXTILE AND CHINA DEPARTMENT.

Superintendent............................T. C. Legoe, What Cheer
Judge ....L. Rayner

HOUSEHOLD FABRICS, QUILTS, ETC.

Ten Yards of Rag Carpet—First, E. Heydon, Mitchellville.

Rug, Any Material—First, A. B. Smith, Des Moines; second, Mrs. J. E. Grant, Carlisle.

Velvet Quilt—First, E. Heydon, Mitchellville; second, Mrs. A. E. Mains, Des Moines.

Silk Quilt—First, Alma Albright, Des Moines; second,, Lenore Steam, Des Moines.

Outline Quilt—First, Mrs. Mae Dougherty, Des Moines; second, Nellie W. Hyde, Des Moines.

Cradle Quilt—First, Mable Luther, Des Moines.

Cotton Patchwork Quilt—First, Mrs. Thos. Robinson, Adelphi; second, W. C. Estes, Packwood.

Log Cabin Quilt—First, N. W.; second, Louise M. Smith, Des Moines.

Worsted Quilt—First, E. Heydon, Mitchellville; second, Eva Freel, Pleasantville.

Specimen of Quilting, Hand Made, Not Less Than One Yard—First, Mrs. J. W. Winegarder, Des Moines; second, Ida Bradshaw, Paton.

Silk Comfort—First, E. Heydon, Mitchellville.

Worsted Comfort—Second, E. Heydon, Mitchellville.

Cotton Comfort—First, Mrs. Emma Dietz, Des Moines.

Cotton Applique Quilt—First, Mrs. I. N. Aldrich, Waukee; second, Mrs. E. A. Waltz, Colfax; third, Mrs. A. S. Marquis, Colfax.

Cotton Braided Rug—First, A. B. Smith, Des Moines; second, Mrs. G. W. Brush, Des Moines.

Cotton Pieced Quilt—First, Mrs. E. A. Waltz, Colfax; second, Mrs. Edith L. Burns, Hartford.

Woven Cotton Rug—First, E. Heydon, Mitchellville; second, A. B. Smtih, Des Moines.

Work Other Than Named—First, Zora Everts, Des Moines.

SEWING.

Work Dress—First, Mrs. C. E. Minehart, Des Moines; second Mable C. Luther, Des Moines.

Work Apron—First, Bud Decker Smith, Des Moines; second, Mrs. C. E. Minehart, Des Moines.

Made Over Dress—First, Mrs. J. C. Ash, Des Moines; second, Bess Geissinger, Des Moines.

Dress Made from Cast-Off Garments for Child Under Eight Years—First, Emma R. Roberts, Des Moines; second, Etta Keeling, Des Moines.

Child's Coat Made from Old Garment—First, Emma R. Roberts, Des Moines; second, Amy Anderson, Bondurant.

Child's Underwear from Cast-Off Knitted Underwear—First, Emma R. Roberts, Des Moines; second, Mrs. F. A. Mathis, Des Moines.

Clothing Made from Sugar or Flour Sacks—First, Emma R. Roberts, Des Moines; second, Mable C. Luther, Des Moines.

Boy's Suit Made From Cast-Off Garments—First, Mrs. Frank E. Scott, Bondurant; second, Etta Keeling, Des Moines.

Child's Clothing Made From Old Stockings—First, Emma R. Roberts, Des Moines.

DARNING.

Darning on Wool Garment—First, Jane Adamson, Ankeny; second, Mrs. J. E. Grant, Carlisle.

Darning on Linen Garment or Household Article—First, Jane Adamson, Ankeny; second, Emma R. Roberts, Des Moines.

PATCHING.

Patching on Silk Garment—First, C. A. Ranz, Newton; second, Mrs. C. E. Minehart, Des Moines.

Patching on Wool Garment—First, Emma R. Roberts, Des Moines; second, Jane Adamson, Ankeny.

Patching on Cotton Garment or Household Article—First, Mrs. Caroline Stendeer, Iowa City; second, C. A. Ranz, Newton.

KNITTED WORK.

Specimen Knit Lace Not Less Than Two Yards—First, Ida Bradshaw, Paton; second, Mary S. Bevan, Des Moines.

Pair Woolen Mittens—First, Ivan Hummer, Iowa City; second, Mrs. Frank Nickerson, Waterloo.

Slumber Robe—First, Ida Bradshaw, Paton; second, Mrs. M. Arnold, Des Moines.

Pair of Slippers, Hand Knit—First, Mary S. Bevan, Des Moines; second, Leona Dietz, Des Moines.

Pair Woolen Socks, Hand Knit—First, E. Heydon, Mitchellville.

Ladies' Sweater, Hand Knit—First, Leona Dietz, Des Moines.

Medallions (Six)—First, Mrs. Carlone Stendeer, Iowa City.

Ladies' Knit Shawl—First, Leona Dietz, Des Moines; second, Mrs. M. Arnold, Des Moines.

Knitted Work Other Than Named—First, Mrs. Caroline Stendeer, Iowa City; second, Ida Bradshaw, Paton; third, Mrs. Julia Nading, Dubuque.

CROCHET.

Medallions (Six)—First, Mrs. J. C. Ash, Des Moines; second, Lotta Ford, Altoona.

Sweater—First, Emma L. Thompson, Des Moines; second, R. L. Thompson, Des Moines.

Filet Tidy—First, A. B. Smith, Des Moines; second, Mrs. J. F. Sniverly, Des Moines.

Tray Mounted—First, Evelyn Grand Pri, Des Moines.

Basket—First, Cora Ellichson, Thompson; second, Alma Albright, Des Moines.

Luncheon Set—First, Emma L. Thompson, Des Moines; second, Mrs. Andrew M. Smith, Des Moines; third, A. B. Smith, Des Moines.

Pillow Cases, Timmed With Cochet Edging or Insertion—First, Cora Ellichson, Thompson; second, Mrs. Art. Shaw, Oskaloosa.

Sheet, Crochet Trimming—First, Mrs. D. D. Dyer, Pleasantville; second, Mrs. Wayne Casady, Carlisle.

Towel, Crochet Trimming—First, Mrs. J. P. Lennon, Des Moines; second, Mrs. Art. Shaw, Oskaloosa.

Turkish Towel, Crochet Trimming—First, Una Buckley, Mitchellville; second, Mrs. Emma Dietz, Des Moines.

Collar—First, Mrs. C. P. Earle, Ames; second, Erma Carruthers, Des Moines.

Collar and Cuff Set—First, Mrs. J. C. Ash, Des Moines; second, Mrs. M. King, Des Moines.

Doily—First, Emma L. Thompson, Des Moines; second, Mary S. Bevan, Des Moines.

Centerpiece—First, C. A. Boock, Des Moines; second, Henry Lund, Algona.

Bag—First, Lotta Ford, Altoona; second, Mrs. R. Rasmussen, Audubon.

Table Runner—First, Leona Dietz, Des Moines; second, Mrs. Jesse Alexander, Indianola.

Night Gown Yoke—First, Mrs. D. D. Dyer, Pleasantville; second, Mrs. Jesse Alexander, Indianola.

Corset Cover Yoke—First, Neah Peel, Des Moines; second, Mrs. J. L. Hall, Ames.

Linen and Crochet Centerpiece—First, W. H. Wait, Leon; second, Mrs. Jas. Furlong, Des Moines.

Linen and Crochet Doilies (Six)—First, Mrs. Oliver Nicholson, Mitchellville; second, Henriette J. Hunter, Des Moines.

Linen and Crochet Lunch Cloth—First, Ina E. Metcalf, Des Moines; second, Mrs. S. N. Flanagan, Knoxville; third, Mrs. Wayne Casady, Carlisle.

Hugger—First, Mrs. Geo. E. Meyers, Des Moines.

Shawl—First, Ella Turnure, Iowa City; second, Mrs. J. L. Hall, Ames.

Cluny Scarf—First, Mary S. Bevan, Des Moines; second, Mrs. Emma Dietz, Des Moines; third, Mrs. A. J. Mathis, Des Moines.

Cluny Centerpiece—First, Mary S. Bevan, Des Moines.

Cluny Yoke—First, Mary S. Bevan, Des Moines; second, Mrs. S. N. Flanagan, Knoxville; third, Lotta Ford, Altoona.

Camisole—First, Mrs. A. J. Mathis, Des Moines; second, Mrs. S. N. Flanagan, Knoxville.

Infant's Sacque—First, Mrs. R. Rasmussen, Audubon.

Hood—First, Mrs. Emma Dietz, Des Moines; second, Erma Carruthers, Des Moines.

Pair of Infant's Socks, Crochet—First, Mable C. Luther, Des Mooines; second, M. S. Jones, Mitchellville.

Pair of Slippers—First, Mrs. C. S. Sulser, Ankeny; second, Mrs. Art Shaw, Oskaloosa.

Cotton Lace, Not Less Than One Yard—First, Mary S. Bevan, Des Moines; second, Cora Ellichson, Thompson.

Crochet Lace on Curtain, One Pair—First, Mrs. Frank Nickerson, Goodhue, Minn.; second, Mrs. S. N. Flangan, Pleasaintville.

Linen Lace, Not Less Than One Yard—First, N. W.; second, O. F. Porter, Ankeny.

Scarf—First, Mrs. E. O. Thornburgh, Pleasantville; second, Mrs. Emma Dietz, Des Moines.

Bedspead—First, Mrs. J. F. Sniverly, Des Moines; second, Mrs. Jas. Furlong, Des Moines; third, Mrs. W. H. Sandy, Elkhart.

Specimen Crochet Work Other Than Named—First, Mrs. J. L. Hall, Ames; second, A. B. Smith, Des Moines; third, Alice B. Beezley, Des Moines.

HAND NEEDLEWORK.

Envelope Combination Suit—First, Mrs. J. C. Ash, Des Moines; second, R. L. Thompson, Des Moines.

Pillow Cases—First, Cora Ellichson, Thompson; second, Mrs. R. Rasmussen, Audubon.

Sheets—First, E. Heydon, Mitchellville; second, Cora Ellichson, Thompson.

Bedspread—First, Mrs. Louis Gresdal, Des Moines; second, Mrs. C. W. Phelps, Des Moines; third, A. B. Smith, Des Moines.

Ladies' Waist—First, Erma Carruthers, Des Moines; second, Mrs. Caroline Stendeer, Iowa City.

Combination Suit—Second, Mary Janes Bennison, Des Moines.

Night Dress—First, Emma L. Thompson, Des Moines; second, Floe Clark, Carlisle.

Child's Dress (Neatest Made)—First, Emma R. Roberts, Des Moines; second, Mrs. Ruth Werner, Perry.

Underskirt—First, Mrs. J. C. Ash, Des Moines; second, Emma L. Thompson, Des Moines.

Corset Cover—First, Bud Decker Smith, Des Moines; second, Mrs. R. Rasmussen, Audubon.

Fancy Apron—First, Mrs. C. S. Sulser, Ankeny; second, Henry Lund, Algona.

Neatest Mended Garment—Second, Mrs. F. A. Mathis, Des Moines.

Neatest Darned Stocking—First, Mrs. Emma Dietz, Des Moines; second, Mrs. J. E. Grant, Carlisle.

Work Other Than Named—First, W. Ingersoll, Polk City; second, Henry Lund, Algona; third, Mrs. M. Arnold, Des Moines.

Pair of Knit Wool Stockins—First, E. Heydon, Mitchellville.

Pair of Knit Wool Socks—First, Mrs. R. K. Dowell, Des Moines.

Pair of Knit Wool Mittens—First, Mrs. Ella Turnure, Iowa City.

Pair of Knit Silk Mittens—First, Ella Turnure, Iowa City.

Pair of Knit Gloves—First, Ella Turnure, Iowa City.

Bedspread—First, Mrs. Caroline Stendeer, Iowa City; second, Dr. B. M. Smith, Altoona; third, Mrs. R. K. Dowell, Des Moines.

Neatest Darned Work, Any Article—First, Jane Adamson, Ankeny.

Neatest Made Dress—First, Mrs. J. C. Ash, Des Moines; second, Louise M. Smith, Des Moines.

Neatest Made Skirt—First, Louise M. Smith, Des Moines.

Specimen Drawn Work—First, Ella Turnure, Iowa City; second, Louise M. Smith, Des Moines.

Specimen Outline Work—First, E. Heydon, Mitchellville; second, M. A. Corrough, Bondurant.

Night Dress—First, M. A. Corrough, Bondurant; second, Mrs. Frank E. Scott, Bondurant.

Specimen Crochet Work—First, Mrs. Elizabeth Cainfield, Des Moines; second, Mrs. J. C. Ash, Des Moines.

Comfort—First, Louise M. Smith, Des Moines.

Silk Quilt—First, Ella Turnure, Iowa City; second, Lenore Stream, Des Moines.

Cotton Quilt—First, Lenore Stream, Des Moines; second, Mrs. R. K. Dowell, Des Moines.

Specimen of Hemstitching—First, Louise M. Smith, Des Moines.

Specimen of Embroidery Other Than Named—First, Mrs. Elizabeth Blackman, Des Moines; second, Mrs. A. S. Marquis, Colfax; third, M. A. Corrough, Bondurant.

Apron, Neatest Made—Second, Louise M. Smith, Des Moines.

Specimen of Lace Work—First, Ella Turnure, Iowa City; second, Mrs. M. Bredimus, Des Moines.

Silk Embroidery Sofa Pillow—First, Mrs. Frank E. Scott, Bondurant; second, Ella Turnure, Iowa City.

Silk Embroidery Lunch Cloth—First, M. A. Corrough, Bondurant; second, Mrs. Frank E. Scott, Bondurant.

Specimen Roman Embroidery—First, Mrs. M. Bredimus, Des Moines.

Shopping Bag, Hand Made—First, Ella Turnure, Iowa City.

Tatting Handkerchief—First, M. S. Jones, Mitchellville; second, Mary E. Barnes, Adelphi.

Work Other Than Named—First, Mrs. S. N. Flanagan, Knoxville; second, M. A. Rood, Des Moines; third, Mrs. A. S. Marquis, Colfax; fourth, Mrs. Frank E. Scott, Bondurant.

LINEN OR COTTON EMBROIDERY.

Centerpiece, 22 in. or Larger—First, Mrs. Oliver Nicholson, Mitchellville; second, Cora Ellichson, Thompson; third, Grace Vannatta, Indianola.

Handkerchief—First, Alma Albright, Des Moines; second, Frances Burt, Valley Junction.

Pair of Pillow Cases—First, M. A. Corrough, Bondurant; second, Mrs. J. P. Lennon, Des Moines; third, Mrs. R. Rasmussen, Audubon.

Six Doilies—First, Mary Jane Bennison, Des Moines; second, Rose Sebbert, Gladbrook.

Six Napkins—First, Emma R. Roberts, Des Moines; second, Mary Jane Bennison, Des Moines.

Dresser Scarf—First, Cora Ellichson, Thompson; second, Mrs. Emma Dietz, Des Moines.

Table Cloth—First, Mrs. Andrew M. Smith, Des Moines; second, Hanna Portel, Des Moines.

Sofa Pillow—First, Mrs. Reid Burks, Des Moines.

Buffet Set—First, Grace Vannatta, Indianola; second, Bess Geissinger, Des Moines.

Night Gown Yoke and Cuffs—First, Margaret Hickenlooper, Des Moines; second, Ida Bradshaw, Paton; third, Ferne Botsford, Des Moines.

Baby Dress—First, Mrs. R. Rasmussen, Audubon; second, Mrs. J. E. Galloway, Des Moines.

Baby Cap—First, Mable C. Luther, Des Moines; second, Mary Jane Bennison, Des Moines.

Lunch Cloth and Napkins—First, Belle Krebs, Avon; second, Mrs. Wayne Cassady, Carlisle; third, Alma Albright, Des Moines.

Pair of Towels—First, Mrs. J. C. Ash, Des Moines; second, Mary Jane Bennison, Des Moines.

Shirt Waist—First, Mrs. R. Rasmussen, Audubon.

Pair Rompers—First, Alma Albright, Des Moines.

Specimen Norwegian Embroidery—First, Mrs. R. Rasmussen, Audubon.

Dressing Jacket and Cap—First, Hanna Portel, Des Moines; second, Grace Vannatta, Indianola; third, Mrs. J. H. Boylan, Des Moines.

Specimen Eyelet Embroidery—First, Mrs. M. Arnold, Des Moines; second, Cora Ellichson, Thompson.

Specimen Coronation Cord Embroidery—First, Mary Jane Bennison, Des Moines; second, Mrs. M. Arnold, Des Moines.

Bed Set—First, Mrs. M. Frazer, Des Moines; second, Ferne Botsford, Des Moines; third, Mrs. Wayne Cassady, Carlisle.

Work Other Than Named—First, Grace Vannatta, Indianola; second, Margaret Wright, Des Moines; third, Hazel F. Wilcox, Des Moines.

SILK EMBROIDERY IN COLORS.

Lunch Cloth, Conventional—First, Louise Geissinger, Des Moines; second, Bess Geissinger, Des Moines.

Piano Cover—First, Mrs. Caroline Stendeer, Iowa City.

Centerpiece, Any Design—First, Mrs. Wayne Cassady, Carlisle; second, Mrs. E. R. Williams, Des Moines; third, Cora Ellichson, Thompson.

Tray Cloth—First, Letha Fenwick, Des Moines; second, Mrs. N. Albertsen, Des Moines.

Bag, Any Kind—First, Cora Ellichson, Thompson.

Sofa Pillow—First, Mrs. R. Rasmussen, Audubon; second, Mrs. H. E. Art, Hartford.

Six Doilies—First, Alma Albright, Des Moines; second, Louise M. Smith, Des Moines.

Envelope Combination Suit—First, Hanna Portel, Des Moines.

Camisole—First, Lenore Stream, Des Moines; second, Mrs. Frank E. Scott, Bondurant.

Work Other Than Named—First, Mrs. R. Rasmussen, Audubon; second, Lucy Jefferson, Des Moines; third, Letha Fenwick, Des Moines.

WHITE SILK EMBROIDERY.

Centerpiece, Any Design—First, Ferne Botsford, Des Moines; second, Bud Decker Smith, Des Moines.

Tray Cloth—First, M. S. Jones, Mitchellville; second, Louise M. Smith, Des Moines.

Child's Flannel Skirt—First, Alice B. Cross, Des Moines; second, Bud Decker Smith, Des Moines.

Infant's Shawl—First, Alma Albright, Des Moines; second, Amy Anderson, Bondurant.

Infant's Cap—First, Alma Albright, Des Moines; second, Bud Decker Smith, Des Moines.

Work Other Than Named—First, Nellie B. Snyder, Des Moines; second, Amy Anderson, Bondurant; third, Miss G. Minehart, Des Moines.

ROMAN EMBROIDERY.

Centerpiece—First, Grace Vannatta, Indianola; second, Hanna Portel, Des Moines.

Sofa Pillow—First, Mrs. R. Rasmussen, Audubon.

Work Other Than Named—First, Miss G. Minehart, Des Moines; second, Mrs. R. Rasmussen, Audubon.

CROSS STITCH EMBROIDERY.

Sofa Pillow—First, Mrs. H. D. Case, Des Moines; second, Miss G. Minehart, Des Moines; third, O. F. Porter, Ankeny.

Centerpiece—First, Miss G. Minehart, Des Moines; second, Mrs. R. Rasmussen, Audubon; third, Mary Jane Bennison, Des Moines.

Scarf—First, Mrs. R. Rasmussen, Audubon; second, Ferne Botsford, Des Moines.

Table Cover—First, Alice B. Cross, Des Moines; second, Alma Albright, Des Moines; third, Ferne Botsford, Des Moines.

Bag—First, Mrs. H. D. Case, Des Moines; second, Alice B. Cross, Des Moines.

Pair of Towels—First, R. L. Thompson, Des Moines; second, Emma L. Thompson, Des Moines.

Luncheon Set—First, Mrs. Andrew M. Smith, Des Moines; second, Mrs Frank E. Scott, Bondurant.

Bedspread—First, Hanna Portel, Des Moines; second, Henrietta J. Hunter, Des Moines.

Doily Roll—First, Hanna Portel, Des Moines.

Card Table Cover—First, Emma L. Thompson, Des Moines; second, R. L. Thompson, Des Moines.

Hot Roll Case—First, O. F. Porter, Ankeny.

Work Other Than Named—First, Mrs. H. D. Case, Des Moines; second, Mrs. Caroline Stendeer, Iowa City; third, Mary Jane Bennison, Des Moines.

HARDANGER EMBROIDERY.

Lunch Cloth—First, Mrs. W. H. Sandy, Elkhart; second, Mrs. E. N. Meyer, Des Moines; third, Mrs. J. C. Ash, Des Moines.

Dresser Scarf—First, Mrs. E. N. Meyer, Des Moines; second, Miss G. Minehart, Des Moines.

Centerpiece—First, Alice B. Pedstrom, Madrid; second, Bud Decker Smith, Des Moines; third, Signe Strandell, Des Moines.

Sofa Pillow—First, Mrs. J. F. Snively, Des Moines; second, Signe Strandell, Des Moines.

Bag—First, Miss G. Minehart, Des Moines; second, Ida Bradshaw, Paton.

Sideboard Cover—First, Bud Decker Smith, Des Moines; second, Mary Jane Bennison, Des Moines.

Work Other Than Named—First, Mrs. Caroline Stendeer, Iowa City; second, Mrs. J. F. Snively, Des Moines; third, Mrs. E. N. Meyer, Des Moines.

MLLE. FLEUR.

Scarf—First, Bud Decker Smith, Des Moines.

Work Other Than Named—First, Mrs. Caroline Stendeer, Iowa City; second, Bud Decker Smith, Des Moines; third, Hanna Portel, Des Moines.

MEXICAN EMBROIDERY AND DRAWNWORK, HANDMADE.

Carver's Cloth—First, M. S. Jones, Mitchellville; second, Louise M. Smith, Des Moines.

Six Napkins—First, Mrs. M. Arnold, Des Moines.

Table Cloth—First, W. H. Wait, Leon; second, Mrs. G. N. Collier, Atlantic; third, Alma Albright, Des Moines.

Dresser Cover—First, M. S. Jones, Mitchellville; second, Mrs. G. N. Collier, Atlantic.

Handkerchief—First, M. S. Jones, Mitchellville; second, Mrs. R. K. Dowell, Des Moines.

Six Doilies—First, Louise M. Smith, Des Moines.

Apron—Second, Mrs. A. J. Mathis, Des Moines.

Centerpiece—First, Mrs. G. N. Collier, Atlantic; second, M. S. Jones, Mitchellville.

Tray Cloth—First, M. S. Jones, Mitchellville; second, Louise M. Smith, Des Moines.

Towel Weaving—First, Cora Ellichson, Thompson.

Pillow Cases—Second, Mrs. R. Rasmussen, Audubon.

Work Other Than Named—First, Mrs. Frank Nickerson, Waterloo; second, Mrs. R. Rasmussen, Audubon; third, Margaret Hickenlooper, Des Moines.

IRISH CROCHET.

Best Trimmed Shirt Waist—First, Mable C. Luther, Des Moines; second, R. L. Thompson, Des Moines.

Lace by Yard—First, Mrs. M. Arnold, Des Moines.

Dresser Scarf Trimmed—First, Emma L. Thompson, Des Moines.

Bag—First, Mable C. Luther, Des Moines; second, Mrs. Jesse Alexander, Indianola.

Collar—First, Emma L. Thompson, Des Moines; second, Mrs. Margaret McCurnen, Mitchellville.

Collar and Cuffs—First, Emma L. Thompson, Des Moines; second, Mrs. J. C. Ash, Des Moines; third, R. L. Thompson, Des Moines.

Yoke—First, Ina E. Metcalf, Des Moines; second, M. S. Jones, Mitchellville.

Infant's Cap—First, Ina E. Metcalf, Des Moines; second, Mrs. Lewis G. Mellem, Des Moines.

Doilies (Six)—First, Mrs. G. Minehart, Des Moines.

Jabot—First, Emma L. Thompson, Des Moines; second, Mary S. Bevan, Des Moines.

Work Other Than Named—First, Mrs. A. S. Marquis, Colfax, second; second, A. B. Smith, Des Moines; third, Mary S. Bevan, Des Moines.

POINT LACE.

Handkerchief—First, Mrs. R. K. Dowell, Des Moines; second, M. S. Jones, Mitchellville.

Infant's Cap—First, Dr. C. F. Spring, Des Moines; second, Mrs. R. K. Dowell, Des Moines.

Tie Ends—First, M. S. Jones, Mitchellville.

Work Other Than Named—First, W. H. Wait, Leon; second Mrs. S. N. Flanagan, Knoxville; third, M. S. Jones, Mitchellville.

TATTING.

Table Cloth Trimmed With Tatting—First, L. C. Road, Des Moines; second, Mrs. G. N. Flanagan, Knoxville.

Edging and Insertion, One Yard—First, Signe Strandell, Des Moines, second, Mrs. J. P. Lennon, Des Moines.

Handkerchief—First, Mrs. E. W. Freel, Pleasantville; second, W. H. McMains, Derby.

Tie Ends or Jabot—First, M. S. Jones, Mitchellville.

Infant's Cap—First, Mrs. D. D. Dyer, Pleasantville; second, Lillian Sheppard, Des Moines.

Towel Trimmed With Tatting—First, Mrs. E. W. Freel, Pleasantville; second, Mrs. D. D. Dyer, Pleasantville.

Apron Trimmed With Tatting—First, Mrs. D. D. Dyer, Pleasantville; second, Bernice Scott, Des Moines.

Centerpiece—First, Eliza Reynolds, Mitchellville; second, Signe Strandell, Des Moines; third, Rose Sebbert, Gladbrook.

Pillow Cases Trimmed With Tatting—First, Mrs. D. D. Dyer, Pleasantville; second, Emma L. Thompson, Des Moines; third, Mrs. R. Rasmussen, Audubon.

Tatting Yoke—First, B. E. Morey, Des Moines; second, Mrs. John Fisher, Des Moines.

Corset Cover, Trimmed With Tatting—First, Mrs. J. P. Lennon, Des Moines; second, Mrs. R. Rasmussen, Audubon.

Table Runner—First, Rose Sebbert, Gladbrook; second, Miss Ethel Orchard, Grundy Center.

Sofa Pillow—First,. N. W.; second, Mrs. C. E. Minehart, Des Moines.

Collar—First, Mrs. Max McVey, Des Moines; second, Lillian Sheppard, Des Moines.

Work Other Than Named—First, Mrs. D. D. Dyer, Pleasantville; second, Mrs. Bessie Hazen, Avon; third, Dr. Alice C. Ackley, Des Moines.

FRENCH KNOT EMBROIDERY.

Pair Pillow Slips—First, Hanna Portel, Des Moines.

Centerpiece—First, E. Heyden, Mitchellville; second, Louise M. Smith, Des Moines; third, A. B. Smith, Des Moines.

Pair Towels—First, Mrs. M. Frazer, Des Moines; second, Louise Geissinger, Des Moines.

Baby Dress—First, Mrs. Anna Gannon, Valley Junction.

Bed Spread—First, Mrs. Reid Burks, Des Moines; second, Mrs. J. A. Dibel, Monroe.

Library Table Runner—First, Bud Decker Smith, Des Moines.

Dresser Scarf—First, Bess Geissinger, Des Moines; second, Mrs. Anna Gannon, Valley Junction.

Buffet Set—First, Mrs. Anna Gannon, Valley Junction.

Card Table Cover—First, Mable C. Luther, Des Moines.

Pair Curtains—First, Mrs. M. Frazer, Des Moines.

Night Gown—First, Mrs. Anna Gannon, Valley Junction; second, Ida Bradshaw, Paton.

Camisole—First, Louise M. Smith, Des Moines; second, Mable C. Luther, Des Moines.

Combination Suit—First, Mrs. Anna Gannon, Valley Junction; second, Mable C. Luther, Des Moines.

BEAD WORK, STENCIL WORK.

JUDGE .... ETTA HANEY

Bead Chain—First, Ella Turnure, Iowa City; second, Mrs. J. F. Snively, Des Moines; third, Margaret Hickenlooper, Des Moines.

Bead Purse—First, Mrs. Andrew M. Smith, Des Moines; second, L. A. Botsford, Des Moines; third, A. B. Smith, Des Moines.

Bead Belt—First, Mrs. M. Arnold, Des Moines; second, Ella Turnure, Iowa City; third, M. S. Jones, Mitchellville.

Bead Miser Bag—First, Ella Turnure, Iowa City; second, Mrs. Stella Randolph, Dawson; third, Mrs. M. Arnold, Des Moines.

Raffia Basket—First, Emma R. Roberts, Des Moines; second, Mary Jane Bennison, Des Moines.

Pair Stenciled Portiers—First, O. F. Porter, Ankeny.

Other Than Named—First, Mary Jane Bennison, Des Moines; second, Emma L. Thompson, Des Moines; third, Emma R. Roberts, Des Moines.

PROFESSIONAL LIST HAND-PAINTED CHINA.

Best Collection—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines.

Vase Over Twelve Inches—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Water Pitcher—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Smoker's Set—First, Mrs. Willard Lyon, Mitchellville.

Dresser Set (3 Pieces or More)—First, Mrs. Frances Stevenson, Des Moines; second, Mrs. F. S. Gibson, Des Moines; third, Mrs. Willard Lyon, Mitchellville.

Bon-Bon Box ((Covered)—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Sugar and Creamer—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Mahlon Gerhart, Des Moines; third, Mrs. Frances Stevenson, Des Moines.

Serving Tray—First, Mrs. Frances Stevenson, Des Moines; second, Mrs. Willard Lyon, Mitchellville; third, Mrs. Mahlon Gerhart, Des Moines.

Set of Plates (8 Inches or More)—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Candlestick—First, Mrs. Frances Stevenson, Des Moines; second, Mrs. Willard Lyon, Mitchellville.

Tea Pot—First, Mrs. Willard Lyon, Mitchellville.

Open Bon-Bon—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Mahlon Gerhart, Des Moines.

Bread or Cake Plate—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Whipped Cream Bowl—First, Mrs. F. S. Gibson, Des Moines; second, Mrs. Willard Lyon, Mitchellville; third, Mrs. Frances Stevenson, Des Moines.

Coffee or Chocolate Pot—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. F. S. Gibson, Des Moines.

Fancy Cup and Saucer—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Decorated Tile—First, Mrs. Mahlon Gerhart, Des Moines; second, Mrs. Frances Stevenson, Des Moines.

Chop Plate—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. F. S. Gibson, Des Moines.

Bread and Butter Plates (Six Inches)—First, Mrs. Willard Lyon, Mitchellville.

Olive or Pickle Dish—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Marmalade Jar and Plate—First, Mrs. Willard Lyon, Mitchellville.

Radish Tray—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Mahlon Gerhart, Des Moines.

Syrup Pitcher—First, Mrs. Mahlon Gerhart, Des Moines.

Bread and Milk Set—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines.

Cheese Plate—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. Mahlon Gerhart, Des Moines.

Salad Bowl—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Mahlon Gerhart, Des Moines.

Fruit Bowl—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Standard or Footed Compote—First, Mrs. Mahlon Gerhart, Des Moines.

Relish Set—First, Mrs. Mahlon Gerhart, Des Moines.

Set Fruit Plates—First, Mrs. Frances Stevenson, Des Moines; second, Mrs. Willard Lyon, Mitchellville; third, Mrs. Mahlon Gerhart, Des Moines.

Card Receiver—First, Mrs. Frances Stevenson, Des Moines; second, Mrs. Mahlon Gerhart, Des Moines.

Vase Under Twelve Inches—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Meat Set (Platter and Six Plates)—First, Mrs. Willard Lyon, Mitchellville.

Tumbler Coasters—First, Mrs. F. S. Gibson, Des Moines.

Milk Pitcher—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Mahlon Gerhart, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Talcum Shaker—First, Mrs. F. S. Gibson, Des Moines.

Tea Pot Stand—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. F. S. Gibson, Des Moines.

Tea Caddy—First, Mrs. F. S. Gibson, Des Moines.

Ice or Butter Tub—First, Mrs. Frances Stevenson, Des Moines; second, Mrs. Mahlon Gerhart, Des Moines.

Fernery—First, Mrs. Frances Stevenson, Des Moines; second, Mrs. Mahlon Gerhart, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

Other Than Named—First, Mrs. Willard Lyon, Mitchellville; second, Mrs. Frances Stevenson, Des Moines; third, Mrs. F. S. Gibson, Des Moines.

AMATEUR LIST HAND-PAINTED CHINA.

Best Collection—First, Mrs. Lake Bower, Des Moines; second, Mae Goodbarn, Des Moines; third, R. L. Thompson, Des Moines.

Chocolate Pot—First, Mrs. Lake Bower, Des Moines; second, R. L. Thompson, Des Moines; third, Nellie W. Hyde, Des Moines.

Comb and Brush Tray—First, Mrs. Lake Bower, Des Moines; second, Mrs. Belle R. Pascoe, Des Moines; third, Nellie W. Hyde, Des Moines.

Perfume Bottle—First, R. L. Thompson, Des Moines; second, Mrs. Lake Bower, Des Moines; third, Louise Y. Erickson, Des Moines.

Spoon Tray—First, Mrs. Lake Bower, Des Moines; second, Anna E. Shettle, Des Moines.

Tea Pot—First, Mrs. Belle R. Pascoe, Des Moines; second, Mrs. Lake Bower, Des Moines; third, Grace Greenleaf, Newton.

Plates (Eight Inches or More) Six—First, Mae Goodbarn, Des Moines; second, Grace Greenlief, Newton; third, Nellie W. Hyde, Des Moines.

Tete-a-Tete Set (Three Pieces)—First, Louise Y. Erickson, Des Moines; second, Mrs. Lake Bower, Des Moines.

Bread and Milk Set—First, Anna E. Shettle, Des Moines.

Relish Set—First, Anna E. Shettle, Des Moines; second, Mrs. Belle R. Pascoe, Des Moines.

Sugar and Creamer—First, Mrs. Lake Bower, Des Moines; second, R. L. Thompson, Des Moines; third, Mrs. Frank Nickerson, Waterloo.

Loaf Sugar Holder—First, Mrs. Frank Nickerson, Waterloo.

Vase, Over Ten Inches—First, Mae Goodbarn, Des Moines; second, R. L. Thompson, Des Moines; third, Louise Y. Erickson, Des Moines.

Vase, Under Ten Inches—First, Louise Y. Erickson, Des Moines; second, Mae Goodbarn, Des Moines; third, Nellie W. Hyde, Des Moines.

Decorated Tile—First, Mrs. Lake Bower, Des Moines; second, Mae Goodbarn, Des Moines; third, S. D. Jackson, Des Moines.

Set Cups and Saucers—First, Grace Greenlief, Newton; second, S. D. Jackson, Des Moines; third, Nellie W. Hyde, Des Moines.

Rose Bowl or Flower Holder—First, R. L. Thompson, Des Moines; second, Mrs. Lake Bower, Des Moines; third, Anna E. Shettle, Des Moines.

Covered Bon-Bon—First, Mae Goodbarn, Des Moines; second, R. L. Thompson, Des Moines; third, Anna E. Shettle, Des Moines.

Olive Dish—First, Mae Goodbarn, Des Moines; second, Louise Y. Erickson, Des Moines.

Desk Set—First, Anna E. Shettle, Des Moines.

Marmalade Jar and Plate—First, Mrs. Lake Bower, Des Moines; second, Anna E. Shettle, Des Moines; third, Mrs. Frank Nickerson, Waterloo.

Candlestick—First, S. D. Jackson, Des Moines; second, Mrs. Belle R. Pascoe, Des Moines; third, Mrs. Frank Nickson, Waterloo.

Nut Bowl—First, Mae Goodbarn, Des Moines; second, Mrs. Lake Bower, Des Moines; third, S. D. Jackson, Des Moines.

Mayonnaise Bowl—First, R. L. Thompson, Des Moines; second, Mae Goodbarn, Des Moines.

Toast or Tea Set—First, S. D. Jackson, Des Moines.

Pitcher (Water or Lemonade)—First, Mrs. Belle R. Pascoe, Des Moines; second, Louise Y. Erickson, Des Moines; third, Mrs. Lake Bower, Des Moines.

Tobacco Jar—First, Anna E. Shettle, Des Moines.

Syrup Pitcher—First, Anna E. Shettle, Des Moines; second, Louise Y. Erickson, Des Moines.

Milk Pitcher—First, Louise Y. Erickson, Des Moines; second, Mrs. Lake Bower, Des Moines.

Tumbler Coasters—First, Anna E. Shettle, Des Moines.

Guest-Room Set—First, Mae Goodbarn, Des Moines; second, Anna E. Shettle, Des Moines.

Open Bon-Bon—First, Mrs. Belle R. Pascoe, Des Moines; second, Mae Goodbarn, Des Moines.

Chop Plate—First, Mrs. Belle R. Pascoe, Des Moines; second, Mae Goodbarn, Des Moines.

Cake Plate—First, R. L. Thompson, Des Moines; second, Mrs. Lake Bower, Des Moines.

Fernery—First, Mae Goodbarn, Des Moines; second, Anna E. Shettle, Des Moines.

Bread and Butter Plates (Six-Inch)—First, Mae Goodbarn, Des Moines; second, Grace Greenlief, Newton; third, Mrs. Frank Nickerson, Waterloo.

Fruit Set (Bowl and Six Plates)—First, Mrs. Gladys Frye, Knoxville; second, Mrs. Lake Bower, Des Moines; third, Anna E. Shettle, Des Moines.

Other Than Named—First, Mrs. Belle R. Pascoe, Des Moines; second, R. L. Thompson, Des Moines.

HAND PAINTED CHINA.

Best Collection—First, Chester B. Hill, Des Moines; second, Ruth Ball, Des Moines.

Vase Under Twelve Inches—First, Chester B. Hill, Des Moines; second, Ruth Ball, Des Moines.

Set Bread and Butter Plates—First, Ruth Ball, Des Moines; second, Chester B. Hill, Des Moines.

Olive and Pickle Dish—First, Ruth Ball, Des Moines; second, Chester B. Hill, Des Moines.

Open Bon-Bon—First, Chester B. Hill, Des Moines.

Bread or Cake Plate—First, Ruth Ball, Des Moines; second, Chester B. Hill, Des Moines.

Water Pitcher—First, Ruth Ball, Des Moines; second, Chester B. Hill, Des Moines.

Coffee or Tea Pot—First, Chester B. Hill, Des Moines.

Set Fruit Plates—First, Ruth Ball, Des Moines; second, Chester B. Hill, Des Moines.

Sugar and Creamer—First, Chester B. Hill, Des Moines; second, Ruth Ball, Des Moines.

Candlestick—First, Chester B. Hill, Des Moines; second, Ruth Ball, Des Moines.

Cup and Saucer—First, Chester B. Hill, Des Moines; second, Ruth Ball, Des Moines.

Syrup Pitcher—First, Ruth Ball, Des Moines; second, Chester B. Hill, Des Moines.

Jardiniere—First, Chester B. Hill, Des Moines.

Other Than Named—First, Chester B. Hill, Des Moines; second, Ruth Ball, Des Moines.

GRAPHIC AND PLASTIC ARTS.

JUDGE .... LUCIE HARTRATH

Oil Painting—First, Jean Dayton West, Waverly; second, Alice McKee, Des Moines; third, Louise C. Garst, Des Moines; fourth, Louise Orwig, Des Moines.

Water-Color Painting—First, Mary W. Brigham, Des Moines; second, Claude Patterson, Des Moines; third, Kate K. Van Duzee, Dubuque; fourth, Lawrence O. Stewart, Des Moines.

Black and White or Monochrome Drawing—First, Kate K. Van Duzee, Dubuque; second, Alice McKee, Des Moines.

Posters of a Pictorial or Decorative Design—First, Alice McKee, Des Moines; second, Louise Orwig, Des Moines; third, Claude Patterson, Des Moines.

Collection of Not Less Than Six or More Decorative Designs Other Than Pictorial—First, Kathryn Dayton. Iowa City; second, Mary W. Brigham, Des Moines; third, Alma M. Held, Waterloo.

Oil Painting—First, Effie M. Kindall, Des Moines; second, Harold C. Oldfield, Des Moines.

Water-Color Painting—First, Harold C. Oldfield, Des Moines.

Junior Division—Collection of Not Less Than Six Original Decorative Designs Other Than Pictorial—First, Belle Scott, Bondurant.

EDUCATIONAL DEPARTMENT.

Set Four Specimens Penmanship From Four Different Pupils—First, Tama County, Toledo; second, Page County, Fairview School.

Set of Number Papers Below Sixth Grade, Illustrated—First, Polk County, Chaffee School, Beaver Township; second, Polk County, Marquisville School.

Composition on Subject, "Insect Enemies of Our Orchards, Garden and Felds"—First, Chaffee School, Polk County; second, Fairview School, Page County.

Set of Papers on Topic, "My Experience With Poultry,"—First, Marquisville School, Polk County.

Set of Three Papers on Topic, "Four Ways of Saving Extra Steps and Work in the Kitchen"—First, Marquisville School, Polk County.

Map Giving Plan of Any Farm—First, Chaffee School, Polk County; second, Marquisville School, Polk County.

Set of Four Pencil Drawings From Two or More Pupils—First, Tama County, Toleda; second, Franklin School, Polk County.

Set Four Water Colors From Four Pupils—First, Fremont County; second, Polk County, Pleasant Valley.

Set Paper Cutting—First, Polk County, Chaffee School, Beaver Township; second, Polk County, Youngstown School, Four Mile Township.

Set Paper Folding—First, Polk County, Chaffee School, Beaver Township; second, Polk County, Woodland School, Four Mile Township.

Map of Iowa by Pupil of Seventh Grade—First, Polk County, Plain View School; second, Polk County, Marquisville School.

Relief Map of U. S.—First, Polk County, Youngstown School; second, Fremont County.

Product Map of U. S.—First, Fremont County; second Polk County, Marquisville School.

Set Ten or More Useful Knots—First, Fremont County; second, Polk County Chaffee School, Beaver Township.

Collection of Soil Samples—First, Polk County, Pleasant Valley; second Femont County.

Collection of Three Articles Made From Wood—First, Cerro Gordo County; second, Polk County, Babbitt School.

Collection of Three Samples of Darning—First, Fairview School, Page County.

Collection of Three Garments Made by Different Pupils—First, Marquisville School, Polk County.

Set of Two Dressed Dolls by Two Pupils—First, Fremont County.

Collection of Ten or More Iowa Grain and Grasses—First, Fremont County; second, Avon School, Polk County.

Collection of Ten or More Troublesome Weeds of the Garden or Farm—First, Cerro Gordo County; second, Nagle School, Polk County.

Any School Work Other Than Named—First, Fremont County; second, Fairview School, Page County.

DIVISION NO. 2.

Set of Six Writing Sheets by Six Pupils—First, Crocker School, Polk County; second, Iowa Training School for Boys, Eldora.

Set of Six Writing Sheets by Six Pupils—First, Elkhart, Consolidated School, Polk County; second, Roland Consolidated School, Story County.

Set of Six Language Papers—First, Elkhart Consolidated School, Polk County; second, Crocker School, Polk County.

Composition on Subject, "Insect Enemies of Our Orchard"—First, Roland Consolidated School, Story County; second, Elkhart Consolidated School. Polk County.

Set of Three Languages on Topic, "How I Helped Win the War"—First, Elkhart Consolidated School, Polk County; second, Crocker School, Polk County.

Set of Original Problems—First, Roland Consolidated School, Story County; second, Elkhart Consolidated School, Polk County.

Set Six Pencil Drawings—First, Johnston School, Polk County; second. Elkhart Consolidated School, Polk County.

Set Six Water Colors—First, Tama County School, Dysart; second, Roland Consolidated School, Story County.

Set Six Charcoal Drawings—First, Elkhart Consolidated School, Polk County; second, Roland Consolidated School, Story County.

Set Six Pen Drawings—First, Willard School, Polk County; second, Roland Consolidated School, Story County.

Set Six Pose Drawings—First, Roland Consolidated School, Story County.

Set Drawings in Any Medium—First, Johnston School, Polk County; second, Runnells School, Polk County.

Construction and Applied Design—First, Roland Consolidated School, Story County; second, Johnston School, Polk County.

Map of Iowa, One from Two Pupils—First, Elkhart Consolidated School, Polk County; second, Iowa Training School for Boys, Eldora.

Set Four Posters—First, Johnston School, Polk County; second, Iowa Training School for Boys, Eldora.

Relief Map of the United States—First, Elkhart Consolidated School, Polk County; second, Roland Consolidated School, Story County.

Product Map of United States—First, Elkhart Consolidated School, Polk County; second, Roland Consolidated School, Story County.

Set Paper Cuttings—First, Johnston School, Polk County; second, Tama County, Traer.

Set Paper Folding—First, Elkhart Consolidated School, Polk County; second, Roland Consolidated School, Story County.

Set Four Useful Articles Loom Weaving—First, Runnells School, Polk County.

Set Four Manual Training—First, Roland Consolidated School, Story County.

Set Four Manual Training Exercises in Wood—First, Roland Consolidated School, Story County.

Set Four Manual Training Exercises in Wood—First, Roland Consolidated School, Story County.

Set Any Four Articles in Sewing—First, Johnston School, Polk County; second, Roland Consolidated School, Story County.

Two Dressed Dolls by Two Pupils—First, Roland Consolidated School, Story County; second, Johnston School, Polk County.

Collection Ten or More Iowa Woods—First, Roland Consolidated School, Story County; second, Elkhart Consolidated School, Polk County.

Collection Ten or More Weeds—First, Roland Consolidated School, Story County.

Any School Work Other Than Named—First, Elkhart Consolidated School, Polk County; second, Runnells School, Polk County.

Best Exhibit Showing, Telling of, or Illustrating War Work Done by School—First, Willard School, Des Moines, Polk County.

DIVISION NO. 3.

Set Physics Note Books—First, Cerro Gordo, Plymouth; second, Runnells School, Polk County.

Set History Note Books—First, Roland Consolidated School, Story County; second, Iowa Training School for Boys, Eldora.

Set Three Language on Topic, "How I Helped Win the War"—First, Elkhart Consolidated School, Polk County.

Set of Three Papers on "My Experience With Poultry"—First, Elkhart Consolidated School, Polk County.

Best Set of Three Papers on Topic, "Four Ways of Saving Extra Steps and Work in the Kitchen"—First, Elkhart Consolidated School, Polk County.

Set Mechanical Drawings—First, R. L. Wishard, Burlington School, Des Moines County.

Set Freehand Pencil Drawings—First, East High School, Des Moines, Polk County; second, Iowa Training School for Boys, Eldora.

Set Charcoal Drawings—First, East High School, Des Moines, Polk County.

Set of Watercolor Drawings—First, East High School, Des Moines, Polk County; second, Iowa Training School for Boys, Eldora.

Set Drawing, Shades and Shadows—First, East High School, Des Moines, Polk County.

Set Drawings Showing Experiment Apparatus from Object—First, Elkhart Consolidated School, Polk County.

Set Designs for Book Cover—First, East High School, Des Moines, Polk County; second, Elkhart Consolidated School, Polk County.

Set Four Illuminated Texts—First, East High School, Des Moines, Polk County.

Set Four Posters—First, East High School, Des Moines, Polk County; second, Elkhart Consolidated School, Polk County.

Set Three Articles in Wood Work—First, Roland Consolidated School, Story County.

Set Four Articles in Wood Work—First, Roland Consolidated School, Story County.

Collections Showing Six or More Injurious Insects—First, Roland Consolidated School, Story County.

Collection Showing Life History of Injurious Insects—First, Roland Consolidated School, Story County.

Any School Exhibit Other Than Named—First, Johnston School, Polk County; second, Roland Consolidated School, Story County.

DIVISION NO. 4.

Rural Schools—First, Jefferson County; second, Marquisville School, Polk County; third, Cerro Gordo County.

Consolidated Schools—First, Roland Consolidated School, Story County; second, Johnston School, Polk County; third, Runnells School, Polk County; fourth. Elkhart Consolidated School, Polk County.

County Collective—First, Polk County; second, Fremont County; third, Jefferson County; fourth, Cerro Gordo County; fifth, Worth County; sixth, Pottawatamie County.

County Superintendent Whose County Wins—First, Polk County; second, Fremont County; third, Jefferson County; fourth, Cerro Gordo County; fifth, Worth County; sixth, Pottawatamie County.

DIVISION NO. 5.

Best Booklet on Any Farm Animal Topic—First, Iowa Training School for Boys, Eldora; second, Cerro Gordo County.

Best Booklet on Any Farm Crop Topic—First, Iowa Training School for Boys, Eldora; second, Cerro Gordo County.

Best Booklet on Any Farm Operative Topic—First, Iowa Training School for Boys, Eldora; second, Fairview School, Page County.

Best Booklet on "My Own Work and Pastimes"—First, Willard School, Polk County; second, Iowa Training School for Boys, Eldora.

Best Booklet on Geography Topic—First, Clive School, Polk County; second, Elkhart Consolidated School, Polk County.

Best Booklet on Gardening—First, Iowa Training School for Boys, Eldora; second, Willard School, Polk County.

Best Booklet on "Iowa"—First, Cerro Gordo County; second, Iowa Training School for Boys, Eldora.

Best Booklet on "My Club Work"—First, Johnston School, Polk County.

Best Booklet on "My Trip"—First, Iowa Training School for Boys, Eldora.

Best Booklet on Cooking—First, Crocker School, Polk County; second, Roland Consolidated School, Story County.

Best Booklet on Sewing—First, Cerro Gordo County; second, Roland Consolidated School, Story County.

Best Booklet on Any Household Industry—First, Elkhart Consolidated School, Polk County; second, Fairview School, Page County.

Best Booklet on "Sanitation"—First, Iowa Training School for Boys, Eldora; second, Woodland School, Polk County.

Best Booklet on "My Experience in Cold Pack Canning"—First, Elkhart Consolidated School, Polk County.

Best Booklet on "Food Conservation"—First, Elkhart Consolidated School, Polk County; second, Johnston School, Polk County.

Best Booklet on "Health Conservation"—First, Iowa Training School for Boys, Eldora; second, Woodland School, Polk County.

Best Booklet on the "World War"—First, Elkhart Consolidated School, Polk County; second, Iowa Training School for Boys, Eldora.

Best Collection of Six Booklets—First, Iowa Training School for Boys, Eldora; second, Fairview School, Page County.

Best Collection of Twelve Booklets—First, Polk County; second, Cerro Gordo County.

DIVISION NO. 6.

Best Exhibit of Photographs—First, Fremont County; second, Fairview School, Page County.

Best Exhibit of Photographs—First, Roland Consolidated School, Story County; second, Elkhart Consolidated School, Polk County.

Best County Collective Exhibit of Photographs—First, Fremont County; second, Jefferson County.

Best Exhibit Showing Ways, Means and Results of Making School Work More Valuable—First, Roland Consolidated School, Story County; second, Cerro Gordo County; third, Willard School, Polk County.

PART V

Report of Secretary of Iowa Farm Bureau Federation at the Annual Convention, Des Moines, January 5-6, 1921

E. H. Cunningham

The past year has been one of ever increasing activities on the part of the officers and directors of the organization. The beginning of the year found the organization with a large number of members which had been induced into membership by a well organized and systematically conducted drive. The first step was to cement this membership into a useful body by building local units in each township. This work was successfully performed under the direction of J. W. Coverdale, who planned and executed the state-wide drive for memberships. So well was this work planned and carried out that in less than three months approximately seventeen hundred townships in the State were organized into useful agencies that have been instrumental in carrying forward under the County Agent as local leader a work which is developing a community spirit in Iowa that will in the near future give the rural resident of the State the distinction of being the most creditable type of citizen that American genius has developed.

EXECUTIVE COMMITTEE

The Executive Committee has held eleven meetings during the year. The work of the Federation has grown so rapidly that it necessitates frequent meetings of the Board. Every member of the committee has given the most loyal support to the President and to the Secretary. The work is becoming more and more burdensome each month and the time given by the Executive Committee members without compensation is liable to prove a hardship, and certain it is that the work cannot go on in an efficient manner at such a sacrifice for any considerable length of time.

The Committee recognized early in the year that owing to the size of the organization and the importance that would attach to its activities, great caution should be exercised in advocating nothing but what good judgment would endorse, and in order to develop a program of work that would in a measure reflect the sentiment of the membership standing committees were appointed as follows:

Marketing and Transportation
Cost of Production
Supply and Demand
Education
Legislation

The Marketing and Transportation Committee recommends:

1st. That a specialist be employed to study terminal market problems and endeavor to work out a plan for co-operative marketing, and also make a study of all factors that enter into price fluctuations and now operate to disturb the stability of marketing.

Acting on this recommendation the Executive officers in co-operation with the Corn Belt Meat Producers' association employed C. L. Harlan, who will make a report on his activities to this body.

2. The committee recommended that the greatest encouragement be given to the organization of local co-operative marketing associations. This work has been carried on through the Secretary's office, and splendid encouragement and help have been given by the Agricultural Extension Department and the Agricultural Economics Department of the Iowa State College. As a result of this work the Federation of Iowa Live Stock Shippers has entered into a mutual working agreement whereby the latter has allied itself as a part of the organization and we are now giving to that organization the fullest protection and supervision which they in turn recognize as being helpful while retaining their identity.

3. The committee further recommended that all possible assistance be given to shippers in procuring cars during the car shortage.

With this thought constantly in mind the Secretary lost no opportunity to reach out in every possible direction in order to render service along this line. In order to get results we necessarily had to go direct to the transportation heads and to every authority in order to make the work effective. In Iowa nearly all railroads center in Des Moines, and the offices of the Railroad Commissioners are also at the capital. In order to make our efforts effective it was necessary to make an untold number of trips from Ames to Des Moines in order to be in personal contact with those in authority. The results of our efforts were to secure the distribution of cars running into the thousands for Iowa shippers, and we are deeply grateful for the valuable assistance and uniformly kind and courteous treatment accorded to us by the Iowa Railroad Commissioners and the railroad authorities with whom we came in contact.

4th. The committee further recommended that the promiscuous investment in promotion schemes should be discouraged. The Secretary's office adopted a plan whereby all promotion companies should be required to file a complete report of their propositions with the County Agent in every county where they sought to operate, on a blank provided by the Secretary. This blank was very exhaustive in its requests. For those whose enterprise could not stand the closest scrutiny it incurred a most hazardous liability. Needless to say that there were many who could not sign and accept the responsibility of a later investigation. The selling of promotion stocks in Iowa was practically stopped by this plan, and for those who still persisted the plan of deflation that struck the country completely finished the job.

COST OF PRODUCTION COMMITTEE

This committee recommended that the work of ascertaining facts on cost of production should be ascertained by co-operating with the Iowa State College. Mr. Munger of the Farm Management Department of the College, who was chairman, gave personal attention to the details of this work, and Mr. Warwick was employed as field man. A block of thirty farms in Marshall County was selected and a set of books opened with each farm. The work of keeping these records complete has been the constant effort of Mr. Warwick. The books were closed for the year on January 1st, but a complete audit will not be available for some time. In addition to this cost account system on this block of farms the Federation has sent out through the County Agents approximately thirty thousand cost blanks with a request from individual farmers that a cost account was desired on some one particular enterprise on that farm. These blanks have not been returned to us as yet, and what percentage of the blanks sent out have been actually used by the farmers and full records kept is impossible to estimate. There has been gathered through survey work cost records on producing wheat, oats and corn. The tabulated data shows the cost per bushel to be as follows:

Wheat	$1.88
Oats	.75
Corn	.93

The expense for gathering this data has been paid by the Federation. Mr. Warwick has been constantly employed on the detailed cost account system in Marshall County, and extra men have been engaged from time to time to do the survey work.

SUPPLY AND DEMAND COMMITTEE

The Committee recommended that a detailed report of the number and kind of livestock be asked for quarterly.

Your Secretary through arrangement with the Bureau of Statistics of the Federal Government whereby the Federation was given the franking privilege, undertook to gather this data. In July 192,000 reports were sent out, and a few in excess of 10,000 returned. The October report was sent to the Co-operators asking for a report on their individual farms. The October report as well as the July report was not at all satisfactory and another report is being asked for this month. At practically every meeting held throughout the year publicity was given to this plan, but the farmers have as yet failed to respond. We shall continue in the work until the farmers generally come to recognize the need of this data and furnish same on request. No matter what plan of marketing is developed, certain it is that without proper information as to what the available supply of marketable livestock is going to be for a given period, there will be little or nothing on which to base a marketing schedule.

EDUCATIONAL COMMITTEE

Their recommendations are as follows:

1. Support the State program of work as outlined by the individual Farm Bureaus and the County Agent Leader.

2. That teachers' salaries in our schools be commensurate with the qualifications of the teacher, regardless of any uniform wage scale.

3. Favoring legislation bettering the educational conditions of the State, and requesting sufficient appropriations to efficiently maintain the schools and colleges.

4. That the Iowa State College provide two weeks short course each year for the purpose of training men to become managers of co-operative enterprises.

5. That the Agricultural Extension Department maintain a corps of experts in order that efficient service can be rendered the farmer.

6. That speakers be provided, composed of farmers who are good speakers to address meetings, such as business men's associations, commercial associations, and consumers' organizations in order that the Federation work may be properly understood.

Of the foregoing recommendations those which were purely questions of legislation were submitted to the legislative committee, and are referred to in their working schedule.

The Secretary's office has, so far as men and funds would permit, carried out the recommendations of the committee. The extent of this work alone will be better understood when we take note of the fact that the Federation furnished one thousand five hundred and sixteen speakers for public meetings during the past year, and it is estimated that this item alone cost the Federation $25,014.00. It was not only the business interests that invited our men to speak to them, but there was a general demand from the farmers for first hand information on the Federation's work.

LEGISLATIVE COMMITTEE

This committee has to do with all things pertaining to legislation. For six months this committee has been giving close attenton to the Code Commission report and to the two hundred fifty odd bills the Commission is recommending to the legislature. It was apparent early in the summer that the recodifying of the code by the Commission and the additional legislation proposed by them required not only a mind familiar with the technical phraseology of legal terms, but also a clear understanding of law. The Executive Committee was asked to consent to the employment of legal counsel, which was granted, and Mr. J. G. Mitchell of Greene, Iowa, was retained as legal counsel. He has been working on the matter of code revision and proposed legislation by the Commission and the preparation of bills that will go before the members of the next legislature.

The committee will give personal attention to the following questions of legislation:

1. To the appointment of a farmer representative on the different boards and commissions.
2. Requesting for the State Educational institutions such appropriations as will enable them to retain instructors of proven ability.
3. A request for such legislation as will simplify and eliminate the great expense in our present system of land titles.
4. The study of tax equalization.
5. The collective bargaining law.
6. An effective blue sky law.
7. Re-writing the law relating to farm aid associations to make more clear its meaning.
8. Law directing railroads to provide stock yard equipment for shippers, and sites and trackage for co-operative associations.
9. Farm land credits.
10. Rural personal credits.
11. Farm tenantry.

The Legislative Committee is a standing committee and Mr. Mitchell will act as the legal representative of the Federation during the coming session of the legislature, and members of the Farm Bureau should avail themselves of their privilege of having legislative matters in which they are interested presented through the legislative committee to the legislature.

The Executive Committee authorized the purchase of the present quarters at Ames at a price of $10,000. The building with remodeling was thought to be ample for the needs of the organization for some years. We are crowded for room at this time, and the Board authorized the removal of the Executive offices to Des Moines, Iowa. This move had been under consideration for some time. The Ames quarters were too crowded, and additional room would have to be secured at once. The work that devolves upon us is largely with the big corporate interests, and practically all have headquarters at the capital city. It appears that we have had one and two men in Des Moines tending to matters in connection with our work every day. This is expensive and a waste of time, and it often requires that the Secretary should personally attend to some of these matters. Often a few minutes of work require nearly a day's time in travel. Des Moines is the capital of the State. Nearly every citizen in the State visits the city some time during the year. This would enable more of our members to take up with us direct many of their problems and give all a better understanding as to the work of their officers. Travel to different parts of the State would be much more convenient, hotel accommodations ample, and the annual meeting must by reason of its great membership be held at Des Moines. The change will be made as soon as convenient quarters can be obtained.

On December 10th the Committee endorsed the constitution and by-laws of the Square Deal Mutual Hail Insurance association and specifically endorsed the settlement feature. The Federation is not as has been generally supposed, controlling this business venture. The legal department of the Federation passed upon the legality of the undertaking and recommended the personnel of the directorship. The company so far as its interests and purposes can be directed by its organization features is in proper form. It must now stand or fall upon the management by its own officers. The Federation cannot undertake to do that part of the work or guarantee its future conduct.

The committee endorsed the plan of affiliation whereby the Federation and the organization of Co-operative Live Stock Shippers co-operate in the control of the latter organization. The Co-operative Live Stock Shippers' association is now properly a bureau of the Iowa Farm Bureau Federation.

The Board authorized not to exceed $10,000.00 to be paid toward defraying the expenses of the Farmers' Committee of Seventeen, appropriations from other States being based on membership and ability to pay.

Mr. Howard formally presented his resignation as President of the Iowa Farm Bureau Federation to the Executive Committee on March 23d on account of his election to the Presidency of the American Farm Bureau Federation. Vice President Hunt succeeded him as President, and Mr. G. M. Fox of Dallas Center, Iowa, was elected Vice President to fill the vacancy.

Mr. J. W. Coverdale tendered his resignation as Secretary of the Iowa Farm Bureau Federation on March 23d, and your present Secretary was appointed to fill the vacancy by the Executive Committee. The Executive Committee expressed their regrets in the loss of President Howard and Secretary Coverdale who had served the organization so faithfully, and the expressed good will of the officers of the I. F. B. F. and the sincere well wishes of the entire membership went with them into their new and larger duties on behalf of the farmers of America.

PRESIDENT

President Hunt has given all of his time to the duties of his office. The days have not had sufficient hours to enable him to keep up with the demands made upon him during the nine months that he has occupied the position of President. There have been constant demands from the counties and commercial interests of the State to address public meetings, and we feel that he has been the one power that has contributed most to the present day strength of the organization. His public addresses before farmer audiences have given our membership a broader vision of the work and a clearer conception of its aims and objects. While these things help to strengthen our organizations, his talks before the business interests of the State have by their sound doctrine brought every interest to a realization that an organization of this kind for the protection of agriculture is fundamentally necessary to the welfare of every other interest.

SECRETARY

Your Secretary assumed his duties without any preconceived ideas of the work entailed in the secretaryship of an organization with a membership in excess of one hundred thousand members. The nine months of service in this capacity have been months of absorbing interest as well as long hours. The recognition that has come to this organization from all sources has had a tendency to constantly increase the demand for service. The details of the office are numerous and necessarily cannot be entrusted entirely to subordinates. Early in the year it became apparent that the work recommended by the Committee on Supply and Demand could never be of the greatest value unless all States of the Mid-West could be induced to join in the work in order that comprehensive knowledge could be had of live stock conditions in each State. Your Secretary asked for an expression of opinion from the Mid-West States as to the probability of their attempting to take up the work along identical lines. The result was that a conference was held at Chicago in which the States of Illinois, Ohio, Indiana, and Iowa agreed upon a uniform plan of gathering this data, and the work is now going on in all of these States and the data gathered during the year in each State will be available to all, and useful in the future development of better marketing conditions.

As editor of the Farm Bureau Messenger, your Secretary has caused the same to be published monthly during the year. The paper is now being mailed direct from the head office. Our problem in this connection can be more fully understood when you note the size and capacity of the plants necessary to publish and distribute agricultural publications and realize that our mailing and handling facilities are confined to one room 14 by 18 feet in size, while our subscribers in Iowa exceed that of any agricultural publication in the State. The size of the periodical and the infrequency of its publication (monthly) necessarily prevents the publication of current news. We are endeavoring to convey to you through this publication the policies and the actual doings of the Federation. Lack of space compels us to confine our information to boiled down facts, but if the members will follow its columns regularly they can keep well posted on the doings of the organization and the proceedings of the Executive Committee.

The practice of holding conferences with the Mid-West group of States has been very helpful to all in that it allowed of free discussion on mutual problems, all with the thought of coordinating the Federation work in the Mid-West States where a similarity of farming conditions created a feeling of mutual interest.

Group conferences, six in number, were held at Indianapolis, Indiana, Chicago, Illinois, Lansing, Michigan, Ames, Iowa, Manhattan, Kansas and Columbus, Ohio. Your Secretary attended three of these conferences outside of Iowa.

Your Secretary attended the conference called by President Howard, at which time the appointment of a committee of seventeen was authorized; also a conference called by the Iowa Bankers' association on the car shortage, and two joint conferences on the car and coal situation; conference with the Corn Belt Meat

Producers to receive Mr. Harlan's outline of a marketing plan for beef cattle; a conference with Mr. Hogan of the Federal Land Bank of Omaha, with regard to influencing action by Congress to raise the loan limit to $25,000; a conference with the Illinois and Iowa Farmers' Grain Dealers on questions of policy; a conference on the proposed foreign credit corporation at which time the Foreign Credits Bank was authorized with a capital of $100,000,000 to extend credit to Europe; conferences with the Iowa Board of Education regarding the financial support of those features of the institutions that serve the farmer in the field. Conferences have been held with the State and Government agents that administer the laws tending to eradicate tuberculosis in live stock; conferences with the State Veterinary association whereby more satisfactory arrangements were secured for the distribution of anti-hog cholera serum and virus.

In September in co-operation with the Agricultural Extension Department ten conferences were held in different parts of the State. These conferences were for the purpose of setting up the organization for a state-wide one-day membership campaign. At these meetings questions of interest to every community were discussed and many trivial misunderstandings were cleared up.

In November four Banker and Farmer conferences were held in different parts of the State, which from point of interest and actual good accomplished were very satisfactory.

President Howard, Governor Harding, Charles Webster of the Iowa Railroad Commission and your Secretary attended a hearing before the Interstate Commerce Commission in August in which a request was made that all rail rates and the water and rail rates between Chicago and the eastern sea ports be equalized. This hearing brought about the equalization of the rate which furnishes great relief to congested traffic between Chicago and the East. To Governor Harding, Mr. Webster and President Howard is due the gratitude of the membership for this piece of good work which is of inestimable value to the country as a whole. This particular piece of work has in all probability been instrumental in bringing more prominently to the attention of the whole country the strength of our organization than any other one thing that has been done. A conference was held with the Iowa Railroad Commission in which the legislative committee participated with a view of preparing amendments to present statutes and recommending new laws tending to increase the efficiency of their service. A conference attended by the Executive officers was held with the Iowa Congressional delegation previous to their departure for Washington to take up their duties in Congress. At this meeting the problems of the farmer and his requirements in matters of legislation were fully discussed, and we can assure our members that the Iowa members of Congress now fully understand their problems and will use every honorable means to protect the interests of the Iowa farmer.

The Farm Bureau picnic dates interferred very materially with the regular work of the office and with many lines of work that necessarily had to be delayed for want of time. The Executive Committee was advised of the situation and their judgment seemed to dictate the necessity of the Secretary attending these meetings in order to bring about a more perfect understanding between the membership and the Executive officers. Your Secretary attended one hundred eighteen county meetings, not including the conferences heretofore mentioned. It is difficult to estimate the value of these meetings to the organization, as the personal relation of the Secretary with the work precludes the possibility of giving an impartial opinion.

Our activities on behalf of the members in rendering service brought us into close relation with the heads of the large corporate interests of the country, from all of whom we have received most courteous consideration; but it is also true that with these interests, as with many others, it is becoming much less difficult to get their attention and co-operation than at any previous time, due no doubt more to their ability for far-sighted discernment than to any conversion of heart.

We are conscious of many necessary short comings in our qualification to adequately serve the members of our organization. Our endeavor has been to carry out every recommendation of the Executive Committee and to confine our every activity to such endeavors as would eventually be for the benefit of our organization. It is well to remember we were beginning a somewhat hazardous undertaking. We had an organization large in numbers hastily thrown together and not used to discipline. It was looked upon with suspicion by the public generally and any break in its ranks would have been welcomed by many. We were all on thin ice. Naturally our constant effort was to secure our membership in its loyalty and to go forward in a manner that would win the confidence of those who distrusted us, building each step on a solid foundation. Too much was involved to permit of mistakes and our cause too righteous to admit timidity or cowardice. We have not slackened our efforts in perfecting the details of the organization, as men have been kept constantly in the field on organization work.

The duties of Treasurer were combined with that of Secretary upon the resignation of Mr. Craven, the former treasurer. Through this arrangement we were able to combine the duties of keeping accounts for the Treasurer and Secretary under one assistant at a saving of over $1,200.00 per annum.

COAL INVESTIGATION

Early in July the coal situation was investigated. Mr. Avery was sent through the Illinois coal fields to determine actual conditions as to supply. His investigation was thorough and exhaustive. It determined one thing early in the investigation that coal at that time could not be bought by any one without paying a premium to the broker. The investigation went so far that your Secretary became convinced that every pound of coal was being profiteered, and issued notice to the effect that every one should do their best to supply as much local fuel as possible. We are of the opinion that this advice was heeded quite generally, as the supply of coal is now beyond the demand, but the price of all coal to the consumer up to this time has been profiteered upon, not by local dealers but by the operators and brokers. It is but one of the scandalous practices that have prevailed in this country and is entirely upon a par with our sugar scandal, which was nothing short of criminal, and yet our great government with its all powerful machinery for enforcing justice was blind to the operations of these high handed pirates that robbed the people with impunity in utter disregard for morals or human welfare. Early in September the confiscation of coal by the railroads threatened serious difficulties for the farmer. It came about suddenly at a time when threshing was at its height. A flood of telegrams and phone calls informed us that threshing machines were being stopped in every part of the State. The Iowa Railroad Commission through Mr. Webster answered our request for immediate action, and upon our showing as to the wide spread seriousness of the problem, immediate release of all coal for threshing was procured.

AGRICULTURAL EXTENSION DEPARTMENT

This department under R. K. Bliss gave the Federation most valuable aid and assistance whenever called upon.

County Agent Leader Murl McDonald was constant in his co-operation with the Federation. In fact it is to Mr. McDonald who had close contact with the County Farm Bureaus through his district men that we were enabled to have closer knowledge of field conditions than we would have been able to obtain otherwise.

COUNTY AGENTS

Very close co-operation was given us by the County Agent force throughout the State. The increased size of the County Farm Bureau membership has added a multiplicity of duties to the County leaders. It is most astonishing as to the amount of constructive community work that can be accomplished through organized and well directed effort. It is also true that the most wasteful extravagance is apparent where County Agent work and community co-operation are lacking. The demands for men to speak that came to us from the County Agents could not be filled. This demand was altogether beyond reason. In fact the entire income of the Federation could easily be spent in expenses for men to fill speaking dates if the requests filed could have been met. The County Agents have recognized our inability to meet their demands and have, as they always seem able to do, adjusted matters with the least possible friction.

SUMMARY OF SECRETARY'S REPORT

The following brief summary of the work done during 1920 by the Secretary will enable you to have a better understanding of the activities and various lines of work which have engaged the time of your Secretary than could come from the reading of a lengthy report.

A. Attended following conferences:

1. Four state-wide Banker-Farmer.
2. Ten district with County Farm Bureau President, Officers, County Agents, Township Co-operators and members to explain Farm Bureau policies and plan organization of one-day state-wide drive.

3. Iowa Bankers' Association regarding the car shortage.
4. Organization at Chicago on Export Credit Corporation project.
5. Adoption of uniform basis for gathering statistics in Middle West.
6. State Board of Education and various departments of the Iowa State College of Agriculture looking to the needs of that part of the work which helps the farmer most in his practical operations, and gives the boy and girl in the country opportunities of securing education so much desired.

B. Attended meetings:

1. One hundred eighteen county wide and district meetings, picnics, etc.
2. Directed speakers to fifteen hundred sixteen county, district, township meetings, picnics, etc.
3. All Federation Executive committee meetings.

C. Gathered statistics and secured information:

1. Cost of production of
    a. Corn
    b. Wheat
    c. Oats
2. "Supply and Demand" Statistics gathered quarterly.

D. Conducted following investigations:

1. Code Commission work and reports to intelligently advise members of the legislature of the effects of proposed legislation.
2. Coal conditions at the mines by Mr. A. M. Avery.
3. Co-operative marketing in California by Professor E. G. Nourse.
4. Canadian co-operative methods of marketing by Mr. A. L. Middleton.

E. Car shortage and railroad rates service:

1. Assisted in securing the equalization of water and rail rates with all rail rates from Chicago to Buffalo and eastern exportation points.
2. Has secured the distribution of thousands of cars (both grain and stock) acting whenever called upon.
3. Secured release of coal for threshing purposes throughout the State.

F. Co-operative Relationship:
  1. With the Grain Marketing Committee of Seventeen, appropriating $10,000 to partially cover the expense of investigating and the study of marketing now being carried on.
  2. With Federation of live stock shipping associations.
  3. With all existing farmers' organizations, especially when common problems arise.

G. Protective Measures:
  1. In using every effort to put a stop to the practice of selling promotion stocks. (Requiring the submitting of answers to an analyzing questionnaire).
  2. In securing a uniform price of serum to farmers by veterinarians.

H. Legislative Work and Program:
  1. Submitted Nolan Bill to referendum vote, thereby awakening the general public to its dangerous features.
  2. Preparing bills on collective bargaining, pure seed, pure serum, farm land credits, personal rural credits, land tenantry commission, securing of proper railroad facilities for shipping purposes, etc., to be submitted.
  3. Secured the acceptance by the Democratic and Republican parties of an agricultural plank in the party platform.

I. Organization:
  1. Directed the organization of the township units, supplying many organizers.
  2. Directed with the assistance of County Agents and Co-operators in putting over the State-wide drive October 12, 1920.

J. Advice and Assistance:
  1. Assisting, encouraging, and advising County Agents, which service is being whole-heartedly reciprocated.

K. Office Management:
  1. Supervising regular routine of office details, which consisted in answering hundreds of letters every week.

L. Publicity:
  1. Editor of the monthly publication, "Iowa Farm Bureau Messenger."
  2. Prepared many news articles for State, county and agricultural press.

M. Treasurer:
    1. Supervised keeping of treasurer accounts and records.
    2. Carefully guarding invested funds.

CONCLUSIONS

The necessity for carrying on with an organization like the Iowa Farm Bureau Federation is very apparent when its varying activities are known. It is now recognized as a potent factor in the future life of agriculture, and while we have been unable to do many of the things hoped for, yet we have advanced at every step with but one thought in mind, that we were building soundly. The year has been one of cautious ventures which led to intimacies with interests that heretofore were not in the habit of asking the opinion of farmers on matters of business except to have him understand that big business necessarily made the farmers' prosperity possible. America never can be assured of her stability and perpetuity if she tolerates a condition that imposes disadvantage upon the producing classes of her Nation which prevent their uplift, their natural progress and intellectual development. Agriculture at this time is probably laboring under more severe imposition than is the just dues of this vitally necessary industry. The thought that something is radically wrong in the economics of agriculture has become a fixed conviction in the mind of the farmer, and an admitted fact in the mind of all fair-minded business men. What then should be our first consideration? Certainly an honest effort to find out what factors or elements in our production, distribution and processing of food stuffs are working hardship to the farmer. The war demonstrated that the farmer has met the question of production under most adverse circumstances and conquered it. The farmer never has been found wanting when called upon to feed the world. The subsequent attempt of marketing at a satisfactory price the products of his labor, not to an over supplied world, but to a world one-half of which is in want, has led to but one conclusion. Financing the farmer through the period of production has been fairly ample, but financing him through the consuming period of the year has never been ample, and as a consequence his products have gone to market in great volumes and in such a short period of time as to allow an unfair advantage to the speculator who did nothing more than store this commodity until the people's needs demanded it. The same unsatisfactory conditions obtain in the marketing of live stock, and the past two years have been disastrous to the live stock men. Recognizing therefore, through absolute necessity the need for co-operating more closely with his associate in business and the further need for applying to the solution of his problems, the same tactics as have been applied to industry, trade and finance, the farmer has built an organization and through it hopes to take his place in the industrial and economic life of the Nation with the determination that those things which now appear so detrimental to his business can be eliminated and that agriculture may stand out as dominant in the conduct of its own business as its importance to the public welfare demands. We must recognize that we have for one year been trying to study and rearrange a system of economic relations for agriculture to the country that have been the results of one hundred fifty years of constantly changing experiments. It is obvious that we will have to be patient and untiring in our efforts. It will take time, years of time to bring about the change we hope for. To indiscriminately condemn and throw aside the present custom until a safe and sure change had been fully developed would only subject the farmer to further embarrassments. Patience and the greatest earnestness of purpose must be maintained. There must be no spirit of cowardice or fear of going ahead in the determination of changing present customs wherever experience has proved them obsolete or inadequate to furnish necessary protection and stability; but before demanding changes let us be sure that we are on a sound basis and acting on sound business principles.

RECOMMENDATIONS

In order to go forward with every degree of safety we make the following recommendations, based upon observations and experiences of the past year.

The program of work for the coming year should be one giving due recognition to the report of the Committee of Seventeen, and a preparedness to take this to our membership in every township of all of the counties of the State, as it is evident that all farmers must co-operate whole-heartedly in the plan if it becomes effective.

That a committee on rural credits should be created at once whose duty it should be to work out a method which will adequately finance agriculture. By co-operating with the splendid banking facilities of the State we should be able to develop a mutually satisfactory arrangement whereby our present banking system should be able to efficiently serve this need. We hope this can be done as above outlined; at least it must be understood that in some manner the question of financing the farmer during the consumptive part of the year as well as the productive part of the year must and will be arranged.

That a Bureau of Research designed to study the drastic fluctuations in live stock and grain marketing is necessary in order that ignorance of cause and effect might not be instrumental in making an otherwise well planned system of marketing ineffective. Through the influence of the Federation, provisions have been made in the next annual budget of the Iowa Experiment Station for a substantial increase in the funds available for studies in the economic phases of Iowa farming, particularly marketing, land tenure, and co-operative organization. We must supplement this work by every means at our command.

Recommend the appointment of a committee to study co-operative marketing and encouraging establishment of co-operative elevators and shipping associations that can correlate and become a part of the marketing plan for grain and live stock, and that the plan or scheme of any organization to build along immature ideas should be discouraged until the plan to be recommended by the Committee of Seventeen has been made public. This will probably mean a co-operative marketing plan for the entire country. A demand should be made of all farmers' organizations that have accepted representation on the Committee of Seventeen to give it loyal support and whole-heartedly support the plan when once put into effect.

Recommend that the loyal farmer members of each County Farm Bureau inform themselves fully on the aims and objects of the organizations in order that their services may be available in filling speaking dates in the townships where the demand is so great that men and limited funds make it impossible for the Federation to meet them.

Recommend to the officers of each County Farm Bureau that closer and more loyal co-operation with the County Agent and his work is most desirable and a more business-like method of handling the county Farm Bureau finances is essential. The careless manner of collecting dues has brought about many complications. It has deprived the Iowa Federation of its just representation in the American Federation Convention. In the State many of the counties have reported a definite membership and failed to pay dues on the number reported. This no doubt is due to the fact that some of the members failed to pay their dues, but in the majority of cases the trouble is due to inefficiency in the manner of collections.

Recommend that the constitution be revised with regard to our National directors. The President and Secretary should by virtue of their offices be made National directors. It seems very necessary that the men who are in direct touch with the work in Iowa in an official capacity should be in a position to direct the National representatives upon matters that have a direct bearing on the Iowa Farm Bureau Federation.

I would recommend that there be held one or more called meetings of the directors in each congressional district to be called by the Executive Committee member of the district in order that there may be developed a closer relationship between the members and the Executive Board of the Federation. At each district meeting the question of an additional State meeting during the year shall be submitted and if the majority of the districts are in favor of such additional meeting, the same shall be called by the President or Secretary. The expense of the directors to such additional State conventions to be paid by the individual County boards.

We would again urge upon the Presidents of the County Farm Bureaus that urgent need of appointing committees to study closely the assessments on real estate for taxation purposes. This committee should meet with the assessors and the township and county boards and assist them in making their levies and equalizing property values. This is imperature. We called attention to this matter six months ago. We hope it has not been neglected. It is a question of great concern to every tax payer at this time when farm lands are being valued highly for taxation purposes, and on the other hand heavily discounted when the farmer attempts to make his income pay a dividend on the value. The greatest caution should govern both assessments and valuations.

The strength of your organization is not in your Executive officers' ability as much as in the loyalty of the individual member. Forces are constantly at work undermining the work of your organization. No more pleasing thing has come to the attention of our enemies than the failure of your Secretary to give wide publicity to the results of the one-day drive. This drive was a pronounced success, and yet at this time, almost three months after the drive, we have but one-half of the reports available. Had this information been promptly reported it undoubtedly would have been the strongest factor in cementing into closer relationship the members of the Farm Bureaus than any one thing done during the past year. As it now stands it has brought to the organization large numbers of new members, but its psychological effect has been discounted by the lack of knowledge on the part of any one as to just what the results were and consequent lack of information on which to base a public statement.

We urgently request that the foregoing recommendations be given due consideration at this time.

Respectfully submitted,

E. H. CUNNINGHAM,
Secretary.

REPORT OF CONVENTION, JAN. 5, 1921

President Hunt: I want at this time to announce the committees:

Joint Committee of Livestock Shippers:

A. Sykes
L. S. Fisher
C. F. Coverdale.

Educational Committee:

I. N. Taylor
L. V. Carter
Gale McClean.

That is a standing committee, however, to consult with the Board of Education.

Special Committee on Taxation:

F. D. Steen
Chas. Cessna
Louis Evans.

Insurance Committee:

J. H. Nordhausen
W. W. Latta
Oscar Heline.

Resolutions Committee:

J. H. Nordhausen
J. W. Davis
Chas. Hearst.

Revising the Constitution:

Frank Justice, Polk county
Ed. J. Palmer, Monroe county
F. G. McLean, Muscatine county
F. K. Fry, Humboldt county
H. Wheeler, Pocahontas county.

Credentials:

A. J. Shinn, Harrison county
Dave McLaughlin, Washington county
Fred Jones, Dickinson county.

I want to impress upon your minds this morning that this Farm Bureau organization, or federation, that has sprung up here like a mushroom in the night, that has yet scarcely had time to learn to walk, is destined to be the greatest organization of its kind, or of any other kind, known to the world. I believe that firmly and thoroly; that this organization is going to live, it is going to grow, it is going to get the desired results for a class that has never had a word to say about the disposal of the wealth which they had been producing for these thousands of years. The farmers never have had anything to say about marketing the products they produce. Why should they have anything to say? They have never been in a position where they could talk, and talk effectively, until we had started this nation-wide organization.

The American Farm Bureau Federation has a big job on its hands. It has the problem of organization that is nowhere near completed; but when we stop and remember that it is only nine months old, or about that at this time, and when we realize that there is something like 1,500,000 farmers embraced within the membership of that Federation, we realize that it is growing and growing fast. It reaches from the Atlantic ocean to the Pacific; it reaches from the Gulf of Mexico to the Canadian line; 37 states, I understood, have now joined the American Farm Bureau Federation; but there is a big work in organization yet to go on.

When you people are inclined to find a little fault with the Federation, that it is not moving quite fast enough, stop and consider some of the problems in organization that the Federation still has to accomplish; think about John Coverdale, secretary of that Federation, reaching 48 states in the United States, superintending and supervising that organization work. It is some problem and it is some work, but it is going to be accomplished and accomplished well.

We have builded on a sound foundation. We have grown from the ground up, and we have a connection now from any farm in Iowa clear along the line, from the township, county, state and nation. We are connected by a tie that cannot and will not be severed; and for that reason, and for the further reason as I stated a while ago, we are going to get results, we are going to grow, flourish and prosper.

Now, the American Federation has done some very good work on transportation. They have a bureau of transportation that is headed by, perhaps, the best man on statistics in the United States today, on railroad statistics, I mean, Clifford Thorne. (Applause). That transportation bureau has been busy and will continue to be busy as the years go by. There is always work to do. The railroad people are looking after their interests, and we are not blaming them for that; all we have to blame is ourselves if we sit still and don't get busy to look after our own interests.

What can the farmers of the United States do individually? How far can we get all by ourselves? Think of those questions when some one whispers in your ear that there is no good in organization. I have heard men say that the farmers cannot organize. I will admit to you that the farmers, perhaps, are the hardest class of people in the United States, or any other country, to get into a comprehensive organization. I would not give as a reason that the farmers haven't brains—they have. They have brains that are cultivated out in the open; brains that are cultivated in pure air, and exercise that gives them good bodily health, unless they get too much of it, and some of them do. In fact, all of them have been getting too much of it. I heard explained the other day why the farmers are hard to organize, and I believe it is pat. It may help you a little in staying by your organization. You know that every other interest is organized and has been organized for a good many years. They have been getting beneficial results for their class of people. The laboring people, taken as a whole, are in a way a machine; they are working for some corporation, they have a special work to do, they have some one to tell them every day to do that job, and they are used to being told to do things; therefore when they are told to join an organization, to get the benefits that ought to come to them, it isn't any trouble to get them in, it isn't any trouble to hold them there. But the farmer, who has been going independently and alone all these years, nine out of ten of them having been their own boss—they have not had much to boss, but they have been fooling themselves in thinking that they have been their own boss and they have been absolutely independent of everybody else—in a way they have, in conducting their little farm, nobody has told them what to do; they have gone ahead doing the things that they saw fit to do. In other words, they have not been dictated to, they have been independent, and for that reason it may be a little hard for them to start out on an organization program. It may be that that is the solution of why the farmers have been having so much trouble in starting these organizations, but we have seen the handwriting on the wall as a result of the terrible war we have gone thru and we are not going to stop and consider our independent position, but we are going to get together and put the force of our organization behind these projects that we want to pull across.

I heard a little story about co-operation that seems to me illustrates very nicely one of the reasons why we should organize. Going out to the farm one cold morning, down at the feed lot, by the hog house, I saw the old sow and a dozen pigs in the pen there. It was a chilly, cold, morning, and the old sow was in the nest and the pigs had nestled all around her; they were all snuggled up close together, and I said to myself "There's one of the best examples of co-operation I have ever seen. Those twelve pigs are all nestled up close together there; they are organized to keep warm, and every mother's son of those pigs was there not so much to warm his brother, but to keep himself warm. (Laughter and applause).

Now, don't think you are sacrificing anything when you are coming to this organization to help your neighbor out. You are not doing that; you are coming into this organization to save your own bacon. (Laughter and applause). That's the proposition.

It seems to me if we studied these questions and thought them over, we would not have any doubting Thomases in our organization. The day has passed when we can tickle the soil with a hoe and have it laugh with the harvest. In fact, it has been laughing the last few years with too much harvest, and that has been one of the things that troubles us. It is not production that we are worrying about so much now, but it is the marketing of that product that we want to solve. It seems to me that the big thing in this organization at this time is to keep our thoughts centered on the correct end of this proposition. We have men in the United States today who will stand upon the platform and tell a body of people that the farmers should have nothing to say, nothing to do, with the marketing end of their business in the United States. I think we had one very large, brainy man at Chicago a few days ago who made the statement that it was the farmers' business to produce, and his business (he was a grain dealer), the business of the commercial interests to attend to the distribution. I want to take issue with that man. I think he went farther and said that the farmers didn't know enough to market their products; that all they knew was to produce. Well, maybe he was half right under past conditions, but the farmers have got brains and they are going to learn how to market their products. (Applause).

The Committee of Seventeen, as you all know, has been spending sleepless nights over this question of marketing the surplus grain in the United States. Reports from that committee indicate that they are very soon going to have a plan to present to the farmers of Iowa and the other states a plan that we can start working on, to market our surplus grain.

We have been told not very long since that we had an overproduction of food products in the United States, and that was the reason why the price of corn slumped down from $1.75 and $1.80 to 60c and 65c, at the most 70c, on the Chicago market. I want to deny this statement that there is an overproduction of food in the world today. (Applause). People in Europe, people who love life just as much as we do, industrious, intelligent people, are starving today for the want of food. It is a condition that we are up against, and I am not going to admit that it is a condition that we might not have helped if we had done the things that have been pointed out that could have been done—that have been pointed out by the Federation that might have been done to alleviate those conditions. There is not a world-shortage of food. There is no reason, outside of the speculative mania of some dealers in the United States, why this corn should be at the price it is today. The trouble with us is that we have gone on producing all these years; have taken it for granted that we could not set the price on our products, and we have allowed some—well, I don't like to describe—I described him down at my home county a day or two ago, that tickled those fellows, but I guess I hadn't better put it that hard now; but the price of bread products is made by the speculative dealers on the board of trade rather than by the farmers who produce that stuff. I want to say to you people that no class and no interest can prosper properly, or efficiently, or as well as they should prosper, when the price of their products, when the wealth that they produce, when the price of that wealth is fixed by some agency without. At the same time, the price of the products of the other agencies in the United States, the price of the products that the manufacturer produces, and other interests produce, is not fixed from without, but is fixed from within. The day is going to come when the farmers of Iowa and the United States will fix the price of corn and hogs and cattle and other products from within. (Applause).

We have been studying the cost of production in the state of Iowa for the purpose of finding out how much it did cost us to produce those products. We do not expect that we shall put a price on our products gauged entirely by the amount it costs to produce it, but we do expect to study supply-and-demand on our own hogs, and finally get the quotient of demand divided by supply, or supply divided by demand, whichever way it goes, and make a price that is justified to us. We expect the Committee of Seventeen to give us a plan so far as grain is concerned.

The financial end of the proposition is a big question, also. We have got to solve the financial end of that proposition, and you are going to hear Mr. Andrews on the platform this afternoon, and he will, perhaps, tell you something about the bankers' phase of that financing problem. I presume he will, I don't know. But here is a thought I want to leave with you people: While that financing proposition is a very necessary one, it is necessary that we work it out, yet it is not hopeless—we can work it out. Mr. Lever gave us a nice illustration of that in his talk at the national convention—he perhaps will be here tonight; we expect him here tonight on this problem, and he may give you the same talk, I don't know; but I am going to steal just a little bit of his thunder because it fits in well right here on the financing part of this program. He said down at Indianapolis that during the war the United States government issued some pieces of paper in the amount of something like 25-billions of dollars, and floated them all over this country. You men who were secretaries of the War Emergency Board know how you went out or sent out letters to your farmer friends over in the different parts of the county and said "Your quota is—so much—Come in and sign up," and he came in and signed up like the good, patriotic soul that he was. I happened to be secretary of our local organization down in Harrison county and I sent those quotas out. I felt like a darn sneak—I guess I had better hold up on that proposition.

Voice: We all felt that way.

The President: But we bought those pieces of paper. We borrowed money at the bank, a good many of us, and paid 8 per cent to pay for them; but the idea I want to get to you people is they floated and sustained 25-billions of value, they cost that much—they are not sustaining quite that much now, but they are answering the purpose. Why? Because the government of the United States is behind the proposition.

Now, the combined wealth of the farms of the United States today is, perhaps, 40-billion dollars—somewhere in there, I don't know just what, but it is a big sum of money. Whether it is 40-billions or 50-billions, it doesn't make very much difference, but the wealth of the farmers of the United States, I think, is equal to the balance of the wealth of all the rest of the United States put together—the railroads, the commercial interests, the banks, and all of them.

Now, when you get ready to finance your proposition, when you get these warehouses filled with grain, when you get the storage houses all over the country filled, why cannot you issue some pieces of paper and let the renter and the other fellows who cannot carry this paper get their money to do business with? It can be done. (Applause). So what is the use of worrying about the financial end of the proposition? I think the banks of the United States will see the proposition in the proper light and come along and co-operate with us nicely on that question.

Say, people, do you know that one of the big things we have done; one of the big results we have gotten from this organization, and it is worth all that it has ever cost us, and worth as much as it will cost us in many years, is the fact that every other interest on the face of this earth wants to get in bed with us; (Applause) and I am in favor, with a few reservations, of allowing, occasionally, one of those fellows to sleep with us over night, because I believe it will do them good. (Laughter and applause).

I cannot take up too much time on these different points, because I want to hit the high spots on a few more, and I am not supposed to talk to you more than twenty minutes, and I have talked more than that now.

But the legislative work of the Federation is no small item. The American Farm Bureau Federations have checked a good many projects that would have cost you men in Iowa more money many times over than you have already paid, or will pay, for your Farm Bureau dues. There has been strenuous effort by the interests to get rid of the excess profits tax. They have been trying to shoulder it over onto the farmer; they have been trying to shoulder it anywhere just so it left their shoulders, and they have been working hard, and they would have had all those things over and we would now be groaning under the burden of that extra tax had it not been for the influence and the power of the Farm Bureau Federation and the state federations scattered around over the United States.

I haven't time to dwell on all of these things. You know that when the railroads were granted the privilege of earning 5½ per cent or 6 per cent, that they immediately began to struggle for a valuation for their holdings. Nobody seems to know how much the railroads in the United States are worth. I think perhaps the valuation, if we could get at it properly, would be around 15-billions of dollars. It might be more—I am only guessing at it, but the railroads, of course, conclude that their holdings ought to be figured at 20-billions of dollars. Clifford Thorne succeeded in cutting that down to about 17-billion dollars, I believe—16-billion 900-million, something like that, so that in that way something like 100-million dollars was saved to the people who are paying the freight in the United States. Not only that, but he shifted some of the responsibility onto the passenger traffic. It was thru his efforts that that was done, and that accounted for another 300-million dollars that will not have to be paid by the freight shippers of the United States, or it has got to be paid by the passenger traffic, but some of that at least until a short time ago, or quite a portion of it, fell upon these men that are called "drummers" that travel around over the state of Iowa. In the end, however, I don't know that we gained so much at that, because the man that buys a suit of clothes or a pair of pants or socks or something to eat, pays that extra passenger fair that is handed on down. You know, the farmer has been the goat for so long paying all these extra expenses that he had almost gotten used to it, and might not have gotten out of the notion if he hadn't run out of money. So there are a lot of things that we can do in the line of legislation to help the farmers of Iowa.

We are having those things in mind; we are studying them as a result; we hope that we are going to be fair with the other interests, but, on the other hand, we want the other interests to be fair with us, and in that way we want to get passed sane, progressive legislation that will give the farmer his fair share. I don't know how much you people know, or how much you realize what a hold we have on the legislators; I mean how anxious the legislators are to accommodate the Farm Bureau, but they are running their legs off to get to us to find out what we want them to do. Did you people in years gone by notice anything about, or ever see the word "farmer" in any of the proceedings, or any of the news items that came from the Congress of the United States until the last year and a half? I don't think you ever did. Today the papers are full of news items from Washington, and almost every one of them has some reference made to the farmer—the farmer wants some legislation, and the senate is unanimous in trying to get it for them. There are one or two men that are not unanimous on our side, but they are being snowed under. Just the other day they passed a resolution reviving the War Finance Corporation. Now, we wanted that done; we didn't think it could do any harm and we thought it might do some good. They passed that resolution,—the house passed it, the senate passed it, and President Wilson vetoed it, but it was immediately passed over his veto. (Applause) One of the important things that I believe the farmers of the United States need is to take care of their interests inside of the United States, and to do that at the present time it seems to me absolutely necessary that we have a protective tariff that will protect the farmers' products. (Applause) We are going to get that tariff because our organization reaches to every corner of the United States, and the farmers are going to be unanimous in the demand for that protection. There isn't any reason why the wool growers of the United States should have to compete against the wool growers of the world right now. We produce about 340-million pounds of wool in the United States annually; we have imported 400-million in the past year. England at the present time has 900-million pounds, and south of the equator, they tell me, there is stored 1-billion 500-million pounds of wool. What show have the sheep growers in the United States with 1½-billion pounds of wool facing us across the ocean which can be quickly placed on the markets of the United States? It is time for us to look after those things, inasmuch as the other interests of the United States have been protected and are being protected.

The automobile industry has a tariff against the importation of automobiles, as we found out at our office in Ames a few nights ago from a young man who came down from Canada. He and his wife and little girl got into a car that he had bought and came down to the United States. He came down to the college and is now working on the college farm. He told Mr. Cunningham that when he got to the American line he was stopped by the customs officials. You know, wheat has been coming over, you have heard about that—there is no tariff on wheat; not only that, but when it comes over here and is sold and they get a dollar of our money, they jump back over the line with it and that American dollar is transformed into $1.30 of Canadian money, so that they have all the advantage in the world over our farmers. When this young man got to the American-Canadian line he was informed that there was a 30% tariff against automobiles coming into the United States. Our automobile dealers in the United States were protected by a 30% tariff against invasion from Canada. The boy had to dig up $450.00 if he came across the line and he didn't have the money, so he took the car back and traded it for a questionable equity in some Canadian land, and came to the United States, anyhow. (Laughter and applause).

So my contention is, whether we are democratic or republican makes no difference, we are all good Farm Bureau members and interested in a tariff for the farmer. And that is one of the things that the American Farm Bureau Federation is working for, and the Iowa Farm Bureau Federation is working for.

I am talking too long—there are lots of things I haven't told you. Mr. Cunningham will give you some of them, perhaps, in his report. I don't want to go on with this rambling talk of mine, but I do want to say just one more thing before I quit. We have one big problem that we must work out, that we have started on, in a way, and that is to study the other fellows' business. They invited us to meet with them and sit around the table—get our feet under the table and put our cards on the table. Of course, they would do that; they know all about our business. The packing industry, the railroad people, all of these big interests, the Standard Oil, and other interests that we might mention, have statisticians that keep studying our business, and they know all about our business and their own, and when they get around the table with us we have no cards and they have the whole deck, so what's the use. But it is our business to get those cards, to split the deck with them, and while we are doing that, we want to be careful that we get the joker and a few aces. (Laughter and applause.) And that is what we are going to try to do. We are going to try to study the railroad proposition. In other words, we are going to try to get them out in the open. We believe that when we get strong enough, and when we get all the figures we can collect of our own, they will see the handwriting on the wall and come out in the open.

It makes me think of a story Palmer told me the other day—I don't know whether you know Palmer, or not, but he is the man that comes into our office every Sunday to get rid of going to church with his wife. He said he was on a train the other day and there was a man whose head was very bald on top, and around the edge he had a very good growth of hair, and the fellow was doing this (scratching his head), and Palmer reached over and touched him with his finger and said, "Say, Mister, why don't you chase them out in the open?" (Laughter and applause.) Now, we are going to try to drive the other fellows out in the open. (Laughter).

We have been studying cost of production, and we have found out something about it, and we haven't put our finding under a bushel and hid it, we are telling everybody, and all we want is a fair price compared with that cost of production. Now, we want the manufacturer when he ships a binder to my town in Harrison county, that I may want to buy to put out on my farm, I want the time to come when he is compelled by Congress in some way to mark the cost price on that binder somewhere so that I can tell what it is. (Applause) I want to know what it has cost him, and I am always willing that he make a fair profit out of it. And I want to say to you people that agriculture is and will continue to be the basic industry. Today the economic structure is shifted from its base and agriculture is left without sufficient finances or transportation for the proper distribution of the farmers' products. Some of our industries in the United States since the war have been coddled. I don't believe that the government should coddle any industry. The farmer doesn't want to be coddled, but he does want and will have an equal share with the other interests. That means the proper financing of his enterprise and other adjustments in distribution that will eliminate the absorpton of all of the profits in that strip of "no man's land" between the producer and the consumer. We have some in-between fellows in that strip of "no man's land" that will have to change their ways. (Applause). We have plenty of land, plenty of food, plenty of men, and plenty of money; the trouble today, ladies and gentlemen, with the money end of the situation is parallel with the trouble we had in the coal situation last summer. The Iowa Federation studied this coal situation; Mr. Cunnngham and myself talked this matter over and we sent a man into Illinois to find out what was the matter with the coal question, and we found out that there was a coal trust, a combination that no man, our local dealers in Iowa, the Iowa Farm Bureau Federation, or no other individual enterprise could buy a ton of coal at the mines—absolutely barred. We could buy it of a speculator along the line after they had put on as many profits for the non-producing obstacles that were standing there as the public would stand. We have now the same proposition, ladies and gentlemen, in the money question. The life insurance companies, most of them, in the United States, who have got your money and mine—they have not got money of mine because my policies expired and I haven't money enough to renew them; but those life insurance companies are loaning money through their brokerage propositions, and every time a broker or straw man intercedes in that proposition he pops up the rate of interest. What we need in the United States today is the active operation of the Federal Farm Loan Act. (Applause) I believe that we are going to have something of that kind. I don't know what the Supreme Court is thinking about; I don't know why they are holding this thing up—in fact, they are supposed to be—it is not immune, unapproachable; I am not condemning the supreme court, they may have very good reason, but I have laid awake nights thinking about that problem, and have not been able to see why they should still hesitate in giving a decision on that case. I am not condemning them, because I don't know, but I do know this, that if it doesn't come pretty soon there is going to be a stir among the Farm Bureau members of the United States and we are going to demand some competition that will break up this money trust that we now have in the United States. (Applause)

I said we had plenty of land, plenty of food, plenty of men, plenty of money. Now, ladies and gentlemen, if we can get into a position, into a state of mind, where we can work together as a whole people and not against each other as classes and interests, then we shall see the standard of living raised to new levels. The prices of farm products today to the farmer are too low; they are not justified. Some of the eastern interests tell us that the price of other products have gone down as much as the farmers' products. I deny that statement. They have gone down some, but there is still that awful inequality. Here are your shoes way up here in the air; your clothes, whether they are shoddy, cotton or all-wool, are up in the air yet; your bacon that you buy at the local butcher shop, or almost any other commodity that you might mention. Your farm machinery, I am told, is going to be higher this year. I think we ought to do something to check that operation. But our products are way down on too low a level.

Now, the thing that we are striving for and must have, and are laboring for, is to raise up our products, and possibly lower those other products a lot and get us all on the same level, and then we will have a fair show with the other fellow.

Now, ladies and gentlemen, I want to apologize to you for talking so long, but I am full of this subject. Mr. Cunningham and myself lay awake nights talking this thing over; we go to bed when there is no other place to go, and we earnestly hope that we may all stick together through thick and thin, and when you see some article in the newspaper that don't look right, don't give us Hail Columbia, but turn your guns on the newspaper, because the chances are that he has misquoted us. (Applause) I am not condemning the newspapers, God Bless them! We couldn't get along without them. They have been standing by us royally; they have been giving us publicity. You know, it has not been over two years ago that the information was circulated out that if we got into the newspapers we had to pay for it, and pay well. Some of our farmers had that idea, but I tell you we have been giving the newspapers some stuff that they want, and they are taking it and giving us good publicity, and I want to hand them that bouquet. On the other hand, we have some farmers who aren't worth a continental, they are pretty shady characters, a few of them, and you have them in all classes of business, and occasionally we run up against a shady reporter, and he is tempted by satan or some other animal to put something in that will look nice in print and he sometimes misquotes us. But we are not condemning them, as I said before; we are going to get along with the newspapers fine. And we are going on with this work, and whether the present officers live or die this cause is going to go on and finally the farm is going to be a mighty good place to live. I thank you! (Applause)

ADDRESS OF MRS. C. H. SEWELL, OTTERBEIN, INDIANA.

Mr. Chairman, Ladies and Gentlemen:

I assure you that it is a very great pleasure, indeed, for a farmer's wife of Hoosierdom to be invited to go visiting and come to such a wonderful place as Iowa. I feel that in view of the things that Mr. Hunt said this morning, you will pardon a little personal note, and I will be like the preacher we used to have, who always said before he began to talk that he "wanted to say a few things."

I am a farmer's wife, doing all the housework that falls to the lot of the average farmer's wife. We have had two children in our home—a little daughter, who has only recently left us for a home of her own, and a seventeen-year-old boy. These children were very typical chaps—they were not ideal children at all—the boy tore up his toys to see what was inside, and our daughter always got peach stains on her best white dress, so I know a great deal about the problems of farm women; and it was necessary for me to get over here to travel from eleven o'clock yesterday until 8:30 this morning; it was necessary for me to do just as your wives or you women would have done on similar occasions—cook up enough to last, and pray it will last, until I get back. (Laughter).

My presence here this afternoon marks, as does your presence here in this convention, an entirely new order of things. Twenty-five years ago the farmer and his wife would not have been found in such gatherings as we have here. The farmer's wife would not have been asked to go visiting, as you have invited me. She would haye been thought to have done her whole duty when she had cooked the dinner and washed the dishes and swept the floor, and done the 1001 little odd things that the farm women have to do, and wipe the noses and wash the hands and send the children off to school, and administer corporal punishment occasionally. Those were the things that were supposed to be the work of the farmer's wife.

Now, I haven't any cure-all for the ills that you farm people are heir to, because we do have real fancied ills today. It is not possible for me to come to you from a sister state, altho I wish I could, and tell you exactly how you ought to run your affairs. If I were able to do one of those things, I would not be here; I would have a wonderful office in a steam-heated building with a mahogany-topped desk, fine chairs, and a thick velvet rug, and you would have to find some way to get in to see me, because I would be very much in demand. I feel very much like the little Irish girl whom you may have heard about who came down to confession one bright Sunday morning. She was a little slow in beginning the recital of her sins, and the good priest said "Well, come, Mary, speak up, what was your sin?" But she kept her eyes on the floor and she said, finally, "Well, Father, if you must know, I kissed my lover," and he said "Well, that's not so bad. How many times?" and she replied "Faith, Father, I came down to confess to you, and not to boast." (Laughter).

When my subject was announced to me, I wondered just exactly what I was going to do with it—Keeping up with Father and the Boys. It seems to me, since I started over to Iowa on yesterday afternoon, and since I had been at the national convention a few weeks ago in Indianapolis, and since I had been reading everything I could get hold of about the doings of the farm bureau in this and other states, I found that farmers were running for president, farmers were being elected governor, farmers were being elected to the halls of legislatures, farmers were attending township, county, state and national farm bureau meetings, farmers were serving on seventeen committees or Committees of Seventeen (Laughter), and I found it was going to be very difficult for mother and the girls to keep up with father and the boys.

I am sure that you will all agree that the very heart of our American agriculture, as Mr. Howard has expressed it several times, is the American farm home, and it was a very gracious tribute, to me a very beautiful thing, when the resolutions committee of the national convention at Indianapolis, at a time when the organization was straining every fibre to formulate plans for the marketing of products, the distribution of those great necessities of life, at a time when they were confronting these problems as business men, that the very first resolution that that dignified body of farmers passed was a resolution commending the farm home and granting to farm women a place in the American Farm Bureau Federation. One of the very first things, it seems to me, that is necessary today for mother and the girls to do to enable them to keep up with father and the boys is a better, an improved system, in some way or other, of farm home life.

Now, I learned something at the national convention; I learned that Mr. Thorne, whenever he wanted to prove anything, either read from the papers that he carried in his portfolio or held up to view the paper to which he referred; and so I learned that if you want to prove the things I am telling you, you may do so by getting this little survey which I hold in my hand that Miss Florence E. Ward of the United States Department of Agriculture calls "The Farm Woman Tells Her Own Story," and you will say after reading it that I haven't exaggerated any of the statements that I hope to make.

It is true that there is a change in the method of farm women doing their work since the days of our grandmothers, when a rude iron kettle hung over the fireplace, with all the inconveniences that go with such a means of cooking; but I have been on the lookout all over the land for more convenient methods of doing my work, because, as Mr. Cunningham told you this morning, I was not a farm daughter—I try to find easier ways to do my work. In the furtherance of this plan, I was blessed with an understanding and comprehending husband, who has been willing to grant me, as far as he had the means to do so, all of the labor-saving conveniences we could afford, but search as I would I have never been able to find anything which I might buy for the use of myself and my daughter whereby we could do all of the farm housework efficiently and quickly and ride around while we were doing it. (Laughter and applause.) I have said several times that about the nearest approach for the farmer's wife and daughter to be able to keep up with father and the boys along some of these lines would be to get a pair of good roller skates. (Laughter).

The farm house wasn't planned very carefully a few years ago. Nobody's house was really planned—they just happened in some way or other, and many of our farm women have fallen heir to a kitchen that has not been planned carefully, and as a result she must take ever-so-many unnecessary steps in the course of a day; she must do so many things that are really too hard for women to do. I like to watch the Pullman chef on a dining car prepare the meal for the many people who come in and out of the dining car every day. You remember, it is just a little place in the wall, and he just simply stands or sits in one place and reaches here and there, and hardly stirs out of his place—but you must remember that it is a man that is doing the work, and he has planned it out carefully. (Laughter). If you were to make a diagram of the kitchen that many farmers' wives occupy and work in, you would see how inconvenient it really is, because the kitchen is the workshop of the farm home, and I believe, after you had contemplated it and looked it over and seen the unnecessary steps you had to take, you would be willing to change the location of a door or a window, put in a new chimney if necessary, and do other things that don't cost very much, after all, and it would make a wonderful saving in the time and strength of the farmer's wife.

I really think there are kitchens in the United States over which farm women preside, where, if you could attach a pedometer to her, as you attach a speedometer to your car, it would register on the farmer's wife more miles at the end of the year than it does when you leave it on the car driven by the county agent. (Great laughter and applause.)

In the building of a new home, or the remodeling of an old one, because that is what a great many of us will have to do (and right here I want to say that I am heartily in favor of remodeling old houses), I have heard many people say "Why didn't you wait and build a new one?" and I have always given this answer "Because, for one reason, if I had waited for the money to be all collected in at one time, there might have something happened that happens sometimes, or I might have been much grayer-headed than I am now; and another reason is we have had the conveniences that we did have while the children were in the home nest and enjoying them, and that is no small item." (Applause).

But in that planning, let us give a great deal of time to the planning of the kitchen. The kitchen is the housewife's workshop, and the laborer is judged by the tools that he has. It goes farther than that, it is the laboratory, if you please, where the food for the farm family is prepared. Most farm women see the color-scheme in their kitchen oftener than they see it in their parlor or drawingroom, and I am much more concerned with having my kitchen a pleasant place than I am in having new curtains for the parlor—if I had one. But it seems to me that a great many women, if I could ask you the question here personally and not embarrass you too much, "What part of the housework do you dislike?" would say, "Oh, the dish-washing." I believe that has come about, in a large majority of instances, because the mother, who is the big-girl of the home, has made the little-girl wash the dishes, chained her to the dishpan on some hot morning in a dark, stuffy, illy-ventilated, ugly kitchen, when all nature and outdoors was crying for her to come out and play; and I am urging, whenever I have the opportunity, do not make one little girl wash dishes all by herself—get somebody, sister or brother, to help her, but do not make the little girl wash dishes all by herself—let's make of that kitchen a pleasant place.

Now, you understand that all of the things we are building and planning have their place as regards the convenient farm home, and one of them is that problem of running water in every farm home. Last year in Indiana we had our special train running over the New York Central lines giving home demonstrations, and in that campaign every one on that train was emphasizing the necessity of installing labor-saving devices, and especially running water in the farm home. It is surprising how easily and how cheaply, when you value the thing all up in relative values, that that can be had. I have in mind a man over in Indiana who is prominent in Federation affairs whom I heard make this statement: For a number of years his wife had plead with him for the installation of running water in the farm home; there were four little children in that home, and she had to carry all of the water in, to say nothing of what she had to do with it after she got it in, and had to get it out again, in the ordinary care of the family. You know, it has been estimated that to do the work for a family of five it takes a barrel of water a day. Now, how far would a young man get in his matrimonial pursuit if he should ask the girl of his choice to carry a barrel of water a day for him every day? And when this farm wife asked for this convenience, her husband would reply "I can't afford it; can't afford it." And finally he came to see that the health of the wife was failing under this drudgery and he decided that he would go ahead and put in the water system, and that big farmer, with a shamed face, said "When the bill came in, it didn't amount to any more than the cost of my self-binder, and I had had three of them during the time my wife and I were keeping house."

A good many times, if we had a partnership affair, giving the farmer's wife a share in the profits and pleasures as well as in the sorrows and burdens and the losses, we could make an improvement on the inside of the house for a great deal less money than we can put it on the outside, and yet it would go far towards solving the unrest among farm women today.

Statistics tell us that young women are leaving the farm homes more rapidly than the farm men. When I was in high school we had a little saying like this: "If all the girls went to Hongkong, where would all of the boys go?" If you were genius enough, you would say "To Pekin." (Laughter). You cannot hope to keep the boys on the farm unless you can keep the girls there.

I have heard the story told of how Clinton Norman Howard rode in the cab of the engine that draws the Twentieth Century Limited between Chicago and New York, and after he had reached the terminal and climbed down from his seat in the cab of the engine, the engineer said to him, "What were your sensations as we came rushing along thru the darkness?" "Well," Mr. Howard replied, "perhaps the thing that impressed me most was the wonderful speed and endurance of the great locomotive." "Yes," said the engineer, "it has great speed and endurance, but did you ever stop to think that if the tender had become uncoupled at any time along the road, then the power and the speed and the endurance of the locomotive would not have been possible? For you know that it is the tender that carries the coal and the water that make the fire and the steam, and they in turn make possible the speed and power and endurance of the locomotive." And after I heard that story and coupled it up with my own experience as a farmer's wife, and with the experience I have been able to gain as an extension worker over the state of Indiana, I have come to the conclusion that the average farmer without women members in his household would be in much the same condition as a locomotive if it didn't have any tender. (Applause).

Perhaps you are wondering why I consider it necessary for me to bring these things to your mind; why should a woman leave her own home in a beautiful state and travel so many miles to talk with you about it? It is because I believe that under the roof of American farm homes there lies the solution to the problems of unrest of the day. Herbert Hoover has said that the farms are the source that have always supplied our country with its true Americanism, its physical and moral strength. You have noticed, I am sure, out here, as we have at home, that since the beginning of the world war, and on thru to the present time, everything you wanted to do was influenced by the fact that out beyond the farms somebody was trying to do less work and get more money for it.

You know that people are leaving our farm homes and flocking to the cities, trying to get in on the ground-floor of success, and it seems to me that even tho the farm life is in some respects, perhaps, a hard one to the farm boy and girl—there are so many chores, it seems as tho they are never done, in some places; that those very things are laying the foundation for character that is going to mean a great deal in solving the problems of the next twenty-five years.

As I came across the intervening states yesterday afternoon, and then again when it got light this morning, I was interested in watching the farm children. Last evening I saw them driving up the cattle and horses—a boy and a dog in so many places, inseparable companions. I was told, when I began to raise my boy, "You cannot raise your boy successfully without a dog." You cannot have a dog in the city, and you cannot have a boy in a great many of the apartment houses in the city, so it was necessary for us to stay in the country. (Laughter and applause). If you will allow me to become personal again, for the boy of this story is a good deal like other boys, I will relate a little illustration. A few weeks ago we had to have a new dog—something happened to ours,—I think all farm mothers dread that sensation,—and I am raising another puppy, and, much like other mothers who had gone thru that experience, I said to my boy "Well, young man, you will attend to this one yourself," which he faithfully promised to do. The puppy was put into the basement at night because of the cold weather, and the tender heart of that great big boy, who is now all arms and legs, was aroused because of the dependence of this puppy. All went well for a while, but in the middle of the night I was awakened by the little fellow crying and whining in his solitude in the basement; but I had made up my mind that I would stand by my statement, and in a little while I heard a noise in the upper bedroom, and then he came quietly slipping down from the second story, got a tin of milk in the kitchen, and then went down and talked to that little lonely puppy. The little fellow seemed to understand that there was some one in the house that really loved and understood him, and after a bit he went whimpering back into his nest. That sort of thing is making character for boys, the sort of character that is being molded to build a great country, and not for bolshevism. (Applause). And we must have all over the farming country some of these farm homes. And because of the need, these bankers and men of finance must help us, as has been said they are ready to do, to make some sort of plan or find some way whereby these young folks who are wanting to build homes in the open country may finance a home, sure that they will not lose their little all, and build homes that will be the cornerstone of the nation in the next few years.

Another reason is because women must have time for the higher things of life. A great many times a woman is so busy with her household duties that she doesn't have time to be a companion to her husband or to play with her children. You know how glad you are when the circus comes to town, so that you can take the children to the show. (Laughter). Have you noticed, and I am sure that you always have, with interest, on each succeeding circus day the juggler, that man who can keep so many butcher-knives or plates in the air at the same time, and never lose one? Have you ever stopped to think how well the farmer's wife may be likened to the juggler? How many things she keeps going at the same time; how many things she keeps in the air, and never lets one of them get tangled up or lost in the doing? The United States census taker says that the farm woman has no occupation, and some one has written these lines:

"The farm wife has no occupation,
'Twould seem her life were one long vacation
Of pies and cakes and pudding making,
Of washing, ironing, churning, baking,
Of feeding men and kids and chickens,
Of working, all day, like the dickens;
At night she creeps into her bed,
Far too tired for prayers to be said,
She must rise next morn at four a. m.,
And do the self-same things again."

(Applause).

During the career of Napoleon Boneparte, he is said to have asked a brilliant woman of his acquaintance, "What can we do to more quickly make France great?" and this was the answer, in a very few but a very forceful group of words: "Educate the mothers." And so that is the reason I am asking, above all things, that the farm women have conveniences in the farm home.

Something has been said of the tenant farmer, but don't forget the tenant farmer's wife. Abraham Lincoln said that God must have loved poor folks because he made so many of them. I don't know how it is in Iowa, but I do know that in my county alone, in the northwest part of Benton County, Indiana, we have a plat of land containing 19,600 acres held in three estates. That means that they are cut up into small farms and operated exclusively by tenant farmers, moving perhaps annually, and the farm women—I am sympathetic with the problems of the farm men, but the farm women have decidedly the worst of it, and if there is anything that the farm bureau can do, either as a state group or as a national one, to make a system of leasing such that the farmer's wives of these tenant farmers have an easier time, they have done a great deal towards solving the great problems of American agriculture. (Applause).

Will you stop to think how much influence the children of the tenant farmer may have over the children in your own home? I believe that anything we may do to make their lot easier and brighter, and help them along the way, will be amply repaid, for we know that out of these tenant farms have come some of the very best men and women of our countryside, and that by so doing we will be doing a great deal to help ourselves.

Now, we have talked long and loud about motherhood; all along the years we have said so much about the mothers. It doesn't make any difference whether you are a farmer, or not, or a farmer's wife, or not, who are represented here this afternoon, but I should like that you get this statement if you forget all else that I have to say: The farmer's wife, as well as the wife of any other man, in order to be the best possible woman in the world—and that is to be the mother of fine children—needs the help and the co-operation of the father.

A little fellow was given a basket ball in his Christmas stocking, and, being of an inventive sort of mind, instead of blowing it up with his mouth as he might have done, he went out and got father's tire pump to pump up the basket ball. The mother found that on that snowy Christmas morning the little fellow, in his haste and excitement to blow up his ball, had gone out into the cold without overshoes, cap, coat or mittens; and, getting all flushed and fussed as mothers do, she remonstrated about it, and he replied, "Just see, mother, I am not a bit snowy. I just walked in dad's tracks." And that is exactly what he had done, just walked in the tracks that father had made earlier in the morning, and his feet weren't snowy a bit. Oh! how many times that has been true—they followed in dad's tracks. And if dad wasn't particular the direction that the tracks took him, mother would have a great deal of trouble in overcoming that influence. So I repeat it, we need your help! (Applause).

Thus far I have talked to you about the help that expensive labor-saving devices such as water system, electric lights, washing-machines, and all these things, may do. There is another place where farm women may do well to keep up with father and the boys, and that is to learn all of the short-cuts. A great many farm women have not been careful to keep up with father and the boys in this idea. They told me when I was going to become a farmer's wife "Really, dear, it's a dreadful life!" They thought if I went into a farm home, there ought to be written over the door of my new home these words "Abandon all hope, ye who enter here." (Laughter). And my grandmother, a beautiful, dear, saintly soul, said "You are full of youth and hope and enthusiasm and love, but this thing is true, 'A man works from sun to sun, but a woman's work is never done.'" And they pulled great long faces when they said that, and I really got a little bit excited about it, but I have come to this conclusion: instead of that thing needing to be true, it is just a mistaken idea, along with a lot of other superstitions. I believe the difference is in this: men know when they have done a day's work, and have common sense and judgment enough to quit, and women don't. (Laughter and applause).

In the springtime of the year when the work is being pushed, as it was in your communities and mine last May, the farmers were just as anxious as could be to get the ground turned over before they left the field at night, and they put in long, hard hours, all that they could get out of the tractor or teams in the time that they were in the field, but when they had done an honest, decent day's work, they put their tractor or teams away, came to the house, cleaned up and had supper, and went to sleep and forgot all about it, and wakened the next morning refreshed and renewed, ready to go out and tackle the job again. But farm women sometimes take their dish-washing or butter-making to bed with them, and such things do not prove to be very good sleep-producers, at all. I believe we have to learn the gentle art of slighting work that is non-essential.

A few years ago in our county we were making some surveys, and one of the questions that we asked in the homes that we entered was this: 'How much time do you spend in rest and recreation every day?" We went into one home where the woman had only one child—no hired man. She was a woman who was known as an immaculate housekeeper, and when we presented this question to her she said she didn't have any time for rest and recreation, that she worked all the time, and finally we coaxed her to say that 15 minutes, perhaps, of all the day she did something a little bit different. And then we went from that home to another, the home of the largest farmer in my county, a man who was unique in his county because at the time we paid the visit there there were 14 children in the home. There were six corn-planters in operation on the day we visited the home, and you know from experience how many men it would take to operate all of the planters, and the amount of work made necessary by those machines. On the trip over, we had been calculating that if a woman with but one child had but 15 minutes a day for rest and recreation, a woman with 14 children would have only one and one-fourteenth of a minute a day. (Laughter). But you will always find the surprises in such homes. When the door was opened, the secretary who was with me was surprised to find that the woman, pleasant-faced and cordial, who opened the door was the mother of this interesting family—she looked scarcely older than her oldest daughter; and when we went thru that wonderful home and asked that question, "How much time do you spend in rest and recreation each day?" she said, as she smilingly looked from one daughter to another (she had two who were helping her do the work), "Well, on the whole, I think two hours a day."

Of course, we wondered how it could be done, and as if in answer to my thoughts she said "While the girls are getting the pictures that you want, I want to show you some of the things I am especially interested in," and one of the things she showed me was the way she ironed her towels. I supposed she would take me down into the basement and show me some electrically—driven machinery that did the work, but, instead, she took me into a wonderfully-planned kitchen, and she opened great drawers and cupboards and bins that were builded into the wall, and in these drawers were piled clean unbleached linen towels. They had been well-washed—I have laundered too many not to know; they had been washed in clear soft-water, with pure, fluffy soap-suds, and they had been hung up and dried in the open air where the sun and wind had done their full duty, and then neatly folded up and put away—they had not been ironed at all. (Applause).

I see women many times in my audiences who shudder when I tell that story—they couldn't possibly sleep on a sheet that didn't have all the wrinkles ironed out. You know the story of what the little boy said about washing himself when he got ready for school—he said, when sister got ready for school she washed herself and then looked in the glass to see if she was clean, but he had just to look at the towel. (Laughter). That's the way some of our farmers wash in Indiana—I don't know how they do it in Iowa. (Laughter). They are in such a hurry that they don't have time to see whether they have got all the dirt off—they just look at the towel; and I wonder whether it makes any particular difference whether you iron that towel or sit up all night crocheting blue lace around the edge, as so many women do.

That is why I am saying that women make slaves of themselves and do a great deal of unnecessary work which could be gotten along without. Our husbands like to rough-it; they don't mind, and they would a great deal rather be able to get into the house all the way, even if it wasn't so immaculately kept, than to be able to get no further than the back door because the cook was cross. (Laughter). Have you ever noticed the hired man and your husband, and even the dog, seem to sense it, and quickly find that they have important business on the other side of the farm or out in the barn in just a little while? And how, when we have worked beyond our strength and are tired out in body, mind and soul, everything goes wrong and we feel upset, and we scold at things that at other times we laugh over? In such times it is a good thing to remember that little verse by Margaret Sangster:

"We have careful thoughts for the stranger,
  We have smiles for the sometimes guest,
But oft for our own a bitter tone,
  And we love our own—the best."

It seems to me that sometimes farm women have forgotten the fact that nature is very exacting. Talk about your farm bankers, that they exact a pay-day. Nature is just as exacting, and she demands the debt shall be paid sooner or later, generally with compound interest, and whenever a woman has been so foolish and misguided as to overwork herself, she borrows from and depletes her capital, for there is strength in reserve enough for just each day. So that I am urging that the farm women learn all of the short-cuts that it is possible for them to get.

The next thing I would ask you to observe, in order to keep up with father and the boys, is the matter of co-operation. I have heard farmers say in the past few years that they have been terribly short of help about their farms. That time comes to all of us, and I have helped my farmer do things that I didn't think I should be asked to do, but I have turned my head and smiled, because, bless your hearts, there has been a shortage of help for the farmer's wife for 25 years.

I have known of farmers in my community to be all ready to thresh and to have to put it off a week or ten days. Why didn't they go ahead and do it? Because they were co-operating with their neighbors, and they have learned to make a great big picnic out of the threshing rig. Have you ever noticed, when you had time to watch the threshing outfit at work, how many aren't busy? They have their shifts—one works a while and then another comes on and works—and it is perfectly right and proper. I am not finding fault with it, but I am wondering if we couldn't co-operate that way too. Perhaps we will learn to co-operate in labor-saving devices.

We are learning to co-operate in our community, in our community club. We have a 12-family club, and a few years ago we had a great crop of undersized peaches which were quite delicious, but they were a terrible torment for any woman to peel enough to can, all by herself, and so one of the enterprising members of our club invited us all in, requesting us to bring our paring-knives, to come early, and we would organize into little groups and companies—one party was to do the paring, the second was to do the canning, another group was to help get the dinner, and still another group was to do something else, and we canned and preserved and buttered enough of those peaches that day to do the county farm, and, best of all, we had a grand, good time. We had to learn a great many things; we found we didn't all do the things alike, and we brought these ideas together. The club functioned so well that we even exchanged patterns of our house dresses. But think, it would have been a great deal of a drudgery on the part of any one woman to sit down all alone and peel and can that many peaches; and so I am only passing this good suggestion along to you.

In the next place, keep up in social affairs. If you neglect to do that that is one reason why women become discontented. They say that the farmer is individualistic. Maybe he is, but farmers manage to get together over the fence or at the farm bureau meetings, and they talk and see one another oftener than the women, and so I think we ought to get together and have something doing in a social way.

The other evening I was invited across two or three counties in my own state to a farm bureau banquet. Two hundred and ten plates were set, all at one time, in a room something like this one. They had made arrangements for all the members of that township unit, and every family to be seated together at one time, and then, just as the bankers do, they pushed back their chairs and had their after-dinner speeches; and it was a very enjoyable occasion. And I am wondering why the township farm bureau units all over the United States could't do the same thing, if they have not already done so—become a real social center for the community.

There is a great deal of difference in the way farmers live and the life lived by the pioneer peoples, and altho we know they had a very hard time, let us not think they had no social life. They were forced to come together, and there was no class or distinction, very little money, you know, and a great many of those young people, and the old ones as well, met together in their apple-peeling and their barn-raising and their corn-picking, and their weddings. The wedding was an attractive feature of pioneer social life, and they tell us many a young couple went off to the squire or the circuit-riding minister on the back of the same horse, or behind a yoke of oxen; and the story is told of one young man who had nothing with which to pay the preacher for his services except a bag of choice dried beans, and how the young bridegroom had to ride many a weary mile before he found a preacher who wasn't already over-stocked with this same delicacy. (Laughter).

My grandmother loved to gossip of the world outside just as much as I do, but in those days they had no telephones, no cable, no wireless, to bring the news of the world, as in this day, to the breakfast table. Instead, she entertained the circuit-riding preacher, or spent half-hour with the man who mended shoes for the settlement, or the man who peddled patent medicines, who went about from one home to another, and she gave to him that which she had to give, and learned from him those things which he had heard. But today we don't like to have people drop in on us unless they first call us up before they start and tell us they are coming, and we make entirely too much of preparation and not enough of real cordiality and genuine welcome. (Applause).

I like the story that is told in that delightful little book, "Mrs. Wiggs of the Cabbage Patch." If you don't have that story, get it and read it at once. If you have read the story, you will remember the time when Mrs. Wiggs was to have a Sunday-school in her front room for the neglected children of the district, and she was getting dinner ready, making potato soup—the kind that you make in town without any cream or butter in it; and so as the children began to come in for their lunch, before the Wiggs's had time to eat their own dinner, Mrs. Wiggs' oldest daughter, who was named Asia, rather wisely surmised that they were coming for some of the potato soup, and, to protect herself, was going to set it aside; but Mrs. Wiggs said "Asia, I wouldn't do that; that is not hospitable; all I've got to do is add a little more water to the soup."

Now, why not do that in the farm home, and make up in real welcome to these people who come to our homes what we lack in appearances and preparation, and let the young people bring their associates in. A great many times the light of a home circle on an undersirable acquaintance will do more to break it up than a great deal of scolding or nagging about it. Make a good deal of the birthdays, and so on, and then reach out just as far and as wide as you can go with the entertainment.

In that connection, I am reminded of that fellow who was always inviting folks home to test the cooking of his brand new wife, and on a number of occasions he had very much embarrassed the bride. On this occasion he brought home the minister, and the bride had one dish of which her husband was especially fond, being a bean salad, and she couldn't make it serve more than two persons, and there was not time for her to make any more. Her husband liked to brag that his wife was always ready for company, and so she did what many an older woman has done, and doubtless you have done, she whispered to her husband, "Don't eat any of that salad." Imagine her surprise, and then her indignation, when the meal was called to see her husband eat heartily of the salad, and after the guest had departed she said to him "You didn't pay a bit of attention to what I told you about the salad, tho, fortunately, the preacher didn't seem to care much for it," and to her astonishment her husband replied, "You didn't say a word to me about it." She had told the wrong one. (Laughter).

The next place I would urge the women and girls to keep up with father and the boys is not to stop until we have as many home demonstration agents in the state, and in the United States, as they have county agents. (Applause). I am sorry to say that Indiana has not nearly as many as Iowa; not nearly as many as we hope to have in the near future. The home demonstration agent has done a wonderfully fine piece of work, and she is going to do more if we give her more funds and ammunition with which to work.

I happened to serve as assistant state leader in Indiana for a period of ten months, and it was my duty to go into the counties and talk about how nice it would be to have home demonstration agents, and some of the women got the wrong idea of the agent's duties. One woman said to me "My dear Mrs. Sewall, do you think I will want one of those little girls coming into my home and trying to tell me how to run my affairs?" And I said "No, I don't think you would," and I don't think she would. (Laughter). That is not what the home demonstration wants to do, or is expected to do; but she is a girl who has been trained in her line of work, who can act as a clearing-house between the United States Department of Agriculture and the Agricultural Extension College, and bring to the overworked woman of the farm a great deal of valuable information.

We used to laugh at book-farming, and some of you haven't gotten over it yet. You say "They can farm on paper, but they don't amount to much when you put them in the field," but we have seen the error of that kind of reasoning. And we women have laughed at book-cooking, just as the men-folks have laughed at book-farming. We have laughed at the new ways of doing things,—and that reminds me of the experience of a minister who was out on his pastoral calls. He was walking along when he heard some one singing "Nearer My God to Thee," and going 'round the house he found that the song came from the kitchen where a colored mammy was at work. He said "Good morning! I'm so glad to see that you've experienced religion." She was like a great many other busy women, she didn't want to be bothered, and she said "'Ligion, nothin' gwan and mind yo' own bizness. I's boilin' de aigs; I alwas sing three verses for aigs sof' and four for aigs hard." (Laughter).

Now, that might be good practice, but maybe I sing faster than you do, and as a result the eggs aren't boiled correctly, after all. But there is much that we can be taught, and much that can be worked out, and "the reason why" will often turn a tragedy into a triumph thru the work of these home demonstration agents.

The work of the girls' club, that has been so nobly fostered by the home demonstration agent, is another line of activity that requires our cooperation. I don't believe it is kept up even in as fine a state as Iowa. I am sure there is nothing that we can do that will tie the young people faster to the farm than the club work. Give them a sense of ownership; give them a sense of responsibility; give them a business sense—a boy or girl with a calf or a pig, or an acre of corn, and they will watch the markets, and when prices go up they are rich, and when it goes down they are poor. I don't know that I ever saw that better illustrated than in an experience we had in our own home. Our youngster had a prize acre of corn which he had planted, and he took great pride in it; but one day a storm blew up and it rained and rained and rained, and as the ground became soft the tall stalks of corn, under the weight of the maturing ears, and the lashing of the wind, began to sag, and finally of their own weight fell to the ground. I remember watching that tear-stained face as he sat by the window glooming over the wreck of his high hopes. But, you know, it taught that little chap that father sometimes has losses, and it made him more tolerant when father had to refuse him things that he wanted, because we didn't have the money with which to buy them. It is not wise, always, for the boys to succeed, neither is it for the girls, and the club work that has been done by the home demonstration agent will be of great help.

The next thing I would urge upon the farm woman, if she wants to keep up with father and the boys, is the matter of her personal appearance. The speaker who preceded me remarked that you don't look like farmers, that you look more like bankers and bankers' wives; and I say that is as it should be. I remember one morning during the short course we were taking at Purdue, of going up into the balcony of Fowler Hall and listening to an address to the corn growers. A woman was with me who was merely visiting there, and, after looking about a bit, she said, "Aren't those fellows down there all county agents or college professors?" and I said "Why, no; those men are just a lot of farmers going to school." Just because it happened to tickle my vanity, and because I wanted to see results, I said "You pick out the ones that you think are county agents or professors, and I'll tell you if you're right," and in eight out of ten times she guessed wrong, she couldn't tell them from college professors and county agents.

Sometimes the farmer's wife has not kept up her personal appearance, for one reason or another. Lillian Russell, that great beauty of the stage, once said, "Whenever a woman says 'I don't care how I look,' she generally looks the part." (Laughter). Someone has said that a police-man in plain-clothes is only one man, but in uniform he is ten men. And so it is true of the farmer's wife, as well as it is of the farmer himself.

When I say that the farmer's wife should be well-dressed, don't understand me to say that she should be stylishly dressed. You women who are well-dressed are women who are suitably and becomingly dressed, and if you have followed women's styles in the past few years you will agree with me that in a majority of instances the woman who is stylishly dressed is neither suitably nor becomingly dressed. (Laughter and applause).

The next place I would urge for you to keep up with father and the boys is in the matter of self-improvement. There is no sadder sight in the whole wide world than that of the woman who has given the best that she has to her husband and family, and not taken the time to keep up with father and the children, but allowed her husband and family to outgrow her, and perhaps in time come to be ashamed of their mother. I have no patience with the woman of today, in these stirring times of reconstruction, who sees nothing in a daily paper but a clean cover for the cupboard shelf or something to cut a pattern out of. Don't let your fingers grow too stiff that you cannot play on the organ or piano; play a little for husband and the children every evening. The old organ in the parlor, or the piano of the present day, is a wonderful instrument around which to keep the family home group. I wouldn't pay any attention to what the neighbors thought about how I spent my spare time, because it is none of their business. (Applause).

It is the business of every farm woman who is represented here today, either directly or by proxy, to live just as long and as well as she can. An old oriental proverb says: "An educated man is an educated individual, but an educated woman is an educated household." I believe, if you will go thru our own history, you will find that in few cases have the great men of our nation left behind them great sons. Few of those great men but haven't said, as did the immortal Lincoln, "All that I am or ever hope to be, I owe to my angel mother." So that the farmer's wife must keep up in self-improvement.

One of the lamentable facts of farm life is that only one out of every thirteen farm women have an annual vacation. I wonder if the farmers have been as careful about seeing that the farm wife got a vacation as they have been about themselves? She may not take it as does the city woman, who goes to the sea-shore or mountains when it is hot, and to California or Florida when it is cold; but she must go away for a while so that she may come back. The far-off fields in the springtime are always greenest, so that if she can go away from her house for a few days or weeks, it is a wonderful help. I know men in our own state, men prominent in Federation affairs, whose wives don't go anywhere, and they always say "I couldn't get my wife to come." I have wondered, altho I didn't know the woman in every instance, if they have been as insistent on the invitation as they were when she was a rosie-cheeked farmer's daughter on the neighboring farm, or the girl from the little village nearby; and I am urging upon you farmers not to forget just how much you owe to those farm women. Other business men can close their doors after office and shop hours and go to their homes. The farmer's wife knows just exactly the things that have confronted you all the day, for she lives in the "office," she boards the men that work for you, she knows when the storm sweeps across the prairie and destroys the growing heads; she knows what it means to you and to her and to the children; but I ask you men, how many times has that little woman put her hand in yours and said "Never mind, dear, we will weather it, somehow." She has had to have the patience and the strength to bolster you up in time of adversity.

Over in Indiana we have inimitable Abe Martin, that happy philosopher whom you all know, and in one of his line he says "A rich farmer's wife usually has a stylish funeral." And have you yourselves not seen the casket of a farmer's wife covered with costly hot-house flowers—when she couldn't smell them—while in life she couldn't even have a flower-bed because you fellows wouldn't repair the chicken-yard fence.

So that I am urging that you give the farmer's wife a vacation; that you take her with you to this sort of a convention. If you do, next year you will have to hire a larger auditorium to hold your convention, because you will want with you, in close co-operation, just as you have in all of the lines of your home work, the farm-wife, the up-to-date woman, to help you. (Applause).

Now, very recently women have been given the right of suffrage. Some of you wondered what we were going to do with it. In some instances what we did with it suited you all right; in others, perhaps, it didn't; but I wonder some times if the farm women have gotten the idea that the big job is all done when we have elected, or we haven't elected, the president of our choice. There are duties that come after war, it is just as much a matter of heroism to be a live hero and live for your country, as it is to be a dead one and have a statue erected to your memory.

And so, as time goes on, farm women, especially, are going to be interested just as their husbands are in those things which are before the national congress of the day. You are very much interested in the passage of the "Truth-in-fabrics" bill. So are the farm women. The unscrupulous manufacturer is also interested in that bill, but his interest is to defeat it, for he knows, for instance, as regards silk, that oftentimes the heavier silks are weighted with metallic salts which destroy the fibers in a very short time. So we are interested in the passage of the Truth-in-fabrics bill. We are also interested, of course, in the Shephard-Towner bill. We are interested in the bill that is an enlargement of the Smith-Hughes bill, which will make it possible for the state extension department to spend as much money for women's work as it spends for men. I have known extension directors—fine fellows—who talked long and loud about not giving the wives a fair share, and yet were spending most of the money on men's work, saying "You women will have to get along, in some way," and we did, because women are resourceful, naturally.

Some of us are scared of politics. The definition of politics is this "Anything that is adapted to public welfare." I agree with Sam Jones that it has fallen way short of its definition—Sam said there is just the "tics" left. I believe that the women can find a large place for their influence and their energy and their resources and their strength.

Now, I am not denying to the gentlemen that we make mistakes. Women will perhaps continue to make mistakes, because we are like the colored brethren, we have been enfranchised for only a short time. (Laughter). George Elliott said "Women are foolish, I am not denying that; but God Almighty made them that way to match up with the men." (Laughter).

Now, community housekeeping, and that is what this bigger work really is, is such that it will take the women to help out in the housecleaning. When a man cleans house or sweeps the floor, he just sweeps up in the middle of the floor, and we have to have the women coming up behind and cleaning the dirt out of the corners. And we believe that is the way it is going to be in what we call community housekeeping. (Applause).

I am sure that another place that mother and the girls will want to keep up with father and the boys is in this wonderfully fine, new, great-big movement called the Farm Bureau organization. I have watched for the past few days great big loads of corn going down the road past my home to market, and I have known that the price of that product was not commensurate with the cost of production, and I also knew that a great many of those teams were the teams of tenant farmers who had to raise their rent by a certain time or would have to move, and if he moves, there is a provision in his lease that he must deliver the corn before he leaves the neighborhood.

We have many real and fancied ills. Sometimes we feel, when we have done all the work and have gotten very little of the pay, that we agree with the poet who sang:

"Truth forever on the scaffold,
  Wrong forever on the throne;
Yet that scaffold sways the future,
  And, behind it in the dim unknown,
Standeth God among the shadows,
  Keeping watch above His own."

And I am sure that the women of the country are going to help everywhere in Federation work in a womanly, modest, becoming way, coming into your sessions when you have invited them, and helping you with anything that they can do. And, if it is possible for us to do it, perhaps with our woman's wit and keen insight, sometimes being able to help out a great deal.

It has been incredible, the growth of the Farm Bureau movement, beginning uncertainly, with no precedent to follow. You have grown from that handful of men who felt that you had a cause that needed to be righted, into this great army of men and women of today. If you were to pass in review before a given place at the rate of 5,000 every day, it would take you ten months to go past the reviewing stand. That is a fine showing; but yet you are only on the threshold, just beginning, as it were, to reach out and do the things that you have laid out for yourselves to do.

We have a campaign of education before us. The farm woman, as well as the farm man, needs to educate the woman and the man of the town and the city of the things that are actually our problems. Farm women sometimes get quite provoked when city people say "Oh, it is so easy to get something to eat in the country, and we love to come to your house, because you have such good things to eat, and it isn't any trouble for you to get it." Sometimes, when I am in a mood to be tired and nervous and pessimistic, I think they come out just for my jam or my ham, and not particularly to see me. (Laughter).

But we need a campaign of education, so that they will know the problems that confront us, the things that we have to do to get the jam and the ham. And so it is that thru this campaign we hope that, instead of perpetuating a class-feeling between us, we will learn of the other's problems and pull together.

In traveling, one is reminded that it needed a man who understood engineering to build that road-bed on which are laid the rails for the cars to roll over; it needed a man who understood the science of driving the great locomotive that brought the train safely thru the darkness of the night to its terminal; and it just illustrates that none can live unto himself and none can die unto himself. And so we have this educational campaign ahead of us.

There are many pitfalls; there are those who would rather we failed than not, but I believe that the women and the girls can step along with heads erect, keeping step with father and the boys, and that we are going to come out in the glad tomorrow with the things that belong to the farm family as their very own. Women have exercised more influence during the past ages than men have properly estimated. As Longfellow said:

"As unto the bow the cord is,
  So is man unto the woman;
Tho she bends him, she obeys him,
  Tho she leads him, still she follows,
Useless each without the other."

And I am sure that is the feeling of every woman and daughter in the United States in farm homes today.

Go ahead with your big, fine work, and make living conditions so FULL and so FINE and so FREE, that instead of the young people of the countryside wanting to leave, they won't want to go away; and if they go for higher education and a better appreciation of their life's work, they will be glad to come back.

And in closing I want to pay this tribute to the farm woman and her daughter:

"Brim the goblet and quaff this toast,—
The country girl and her mother!
May our nation always have room to boast,
Of the country girl and her mother!

"And if we keep a smiling face,
And if with patience we run our race,
There surely in Heaven will be a place
For the country girl and her mother."

(Great applause, audience rising).

ADDRESS OF HON. A. F. LEVER, SOUTH CAROLINA.

State Convention of Iowa Farm Bureau Federation

January 6th, 1921.

Mr. Chairman, Ladies and Gentlemen:

I didn't know until the morning after election last November how many friends I had in the great state of Iowa. The election returns the morning after emphasized very impressively that my popularity in the state was even greater than I suspected, and it happened in this way: In 1916 I made six speeches out here in the Sioux City district campaigning to reelect old Uncle Tom Steele and the Democratic ticket. I think we lost the state then by 101,000 majority, but think by what we lost it this time, because I didn't come back here in 1920 and campaign for them. (Laughter and applause). I will tell you a secret, my friends—I had the pleasure a moment ago of being introduced to an Iowa democrat, and I never thought it possible. (Laughter). And it kind of reminded me of a thing that happened down in the mountains of West Virginia in 1916 when I was joint-debating with a West Virginia republican member of congress, and we had a tremendous crowd down there. The democrats were wearing white badges and the republicans red badges. We were good friends, this congressman and I, and I happened down in front of the hotel where he stayed, and together we sat there watching the crowd go by, gathering for this meeting, and I said to him "John, I bet you I can pick out every republican that passes here—I'll bet you a dollar on it," and he said "I'll take your bet." Pretty soon there straggled along a lean, lank, long-haired, long-whiskered mountaineer, and I said "John, I'll bet he's a republican," and when we inquired of him he said that he was. Soon another fellow came along, a man with a red necktie—a little bit redder than mine—(Laughter) celluloid collar and cuffs to match, and I said "There's another republican," and when I inquired he said "Yes, I'm a republican; been born a republican and never intend to quit the Grand Old Party."

Very soon there came limping along a little dapper fellow about my size with dark complexion (Laughter), and the poor fellow had had the smallpox in his day and generation and it left its marks all over his face, and I said to my friend "There's another republican," and I called him over and said "My friend, are you a republican?" and he said "Lord, no, boss; I ain't no republican; I just had the smallpox." (Laughter).

Well, after all, my friends, as I travel over this great country of ours and look into the faces of the men and women that make up these splendid and inspiring audiences, I have about reached the conclusion that our differences in politics don't amount to a great deal; that the one big thing that moves us, and the one big thing that should move us, is that we are all Americans, believing in the same general purposes of the institutions of the American government, and honoring and loving the same old flag. (Applause).

The world is in a state of flux. The debris of empires and dynasties are floating upon the troubled seas. The institutions of our country alone have withstood unimpaired the terrific impact of the recent world debacle. These debris must unite again if civilization is to continue, and the future of the world depends upon the manner in which they reunite, upon the kind of cement that is to be used to hold them together for all future time. This is certain, that the old order of things is passing away, and that a new standard as between man and man has arisen out of the great catastrophe of the past four years. This new standard has as its basis Justice as between man and man, and as between class and class. It has as a basis of it a better understanding of the relationship which each of us bears to the other, and which each class of our country bears to every other class of our country.

With this as a basis, I want to direct your attention briefly to a few facts that have grown out of the old order of things, that have resulted from the old system, which we hope may be supplanted by a better system.

First: More than one-third of the agricultural population of the United States is classed as tenant farmers. More than one-third of the farmers of the United States have no ownership in the roof which protects them from sunshine and shadow; no ownership in the hearth around which is gathered that little family for evening prayer. The great agnostic, Robert G. Ingersoll, on one occasion in one of his great lectures said, in substance, that "Patriots may be born in twelve-story apartment houses, but it is much easier to incubate them upon the free ranges of the American continent." And if the institutions of this country should ever be in danger, as God forbid that they should, it will be due to the fact that a too large percentage of our people are not the owners of the home in which they live. And I doubt tonight if there is a more vital problem before the American people than the problem of a more universal home-ownership among our population.

Second: I am briefing this, gentlemen; I am not going to read you anything. I just use this because I liken myself to a horse, if I don't put a bridle on me I may stray out on the road, and I don't want to do that.

The salaries of our country teachers and our country preachers, and the net return upon the investment of our farms, are the lowest of any other class in America. Do you get that? Listen! To the teacher, who more than any other individual, save the mother, molds the character of the future citizenship of this country, on the average we pay a salary that is not much greater than you pay to the char-women who clean the spitoons and scrub the floors of your capitol of the state of Iowa. If you don't believe that, look up the figures. To the man of God, the spiritual leader of 49 per cent of our population, the country preacher, we pay a miserable pittance that doesn't compare to the amount that we in Washington pay to the messengers who wait upon us from day to day. And the figures will demonstrate beyond cavil that for the amount of capital invested, for the amount of brains expended, for the amount of brawn put into it, there is a less return to the American farmer than there is to any other class of people in this country who labor. It is a situation, gentlemen, to challenge the consideration of the wisest of us, when the three essential elements of civilization—the teacher, the preacher, and the man who feeds and clothes us—should be at the foot of the ladder in the scale of wages.

So much for that. Our country roads, mile for mile, are the poorest of any roads of any first-class civilized nation in the world, with the result that the transportation cost of farm products in America are anywhere from one and a half to three times as great as it is in nations like England, France, Germany, and Italy—before the great world war.

Our rural women, the mothers of 49 per cent of our population, are living under the tragic burden of isolation. I heard the wonderful story of that wonderful woman from Indiana this afternoon, and it was worth my two days and two nights on the train to hear that. My friends, without egotism, may I stop to say this? I was the author of the Smith-Lever Act, which is a kind of grand-daddy of your Farm Bureau Federation, and, as the son of a country woman who died when I was a babe five months old, as a country boy who had lived a life of the average country boy, and had known the struggles of the average poor country woman, it was my proud privilege to write into that act that some of this money should be used to teach the country woman and the country girl; and when I shall pass over and be gathered to my fathers, I want it writ upon my tomb "Here lies the body of a man whose work was the first recognition by a federal congress of the existence of such an individual as the American country woman." (Applause). She works 13 hours a day; it is not infrequent for her to drop a 5-gallon bucket into a 75-foot well, windlass that up, and then carry that bucket 75-feet into the house, and then lift it up two feet over her head, and then dip it out and use it for cooking purposes. That may not be true in Iowa, gentlemen, but it is true in South Carolina. I took occasion one day to satisfy myself to locate the wells on the farms within a distance of twenty miles from my home, to ascertain if they were located with reference to the convenience of the horse trough or the kitchen, and what do you suppose I found? (Laughter). Of course, this is not true in Iowa, but is true in South Carolina.

(Laughter). I found that 18 of the 20 wells were located with reference to the convenience of the horse trough. (Laughter).

My friends, some of you have heard this—that's the trouble about these fellows following you around—you never can make a speech that you haven't heard,—I sometimes say that Henry Ford, a much-ridiculed and laughed-at man, is the greatest benefactor of the human race of his generation. Now, laugh at that. And why? Because Henry Ford devised a method of quick and cheap transportation over country roads. You know, when we men folks get a little out of sorts because the hogs break over into the corn field and raise thunder, we get mad and cannot get them in, and it is cold and wet and slush, we just hitch up little tin Henry and drive into town and pull out our knife and get a piece of white pine and sit down against a country store, whack off a piece of chewing tobacco, and we begin to spit, and we discuss whether there is milk in the milky-way, or not, and whether the League of Nations will cure all the sins of the human family, or not, and then after we do that for a half hour or so, we don't care whether the hogs do eat the corn, or not, and we get into a good humor. But when the old cow kicks over the bucket in the morning, and Johnny gets stubborn and lies down on the floor and howls, as my boy does once in a while, and things go wrong around the house, poor mother has to stand with her nose to the rack, fodder or no fodder, it doesn't make a particle of difference. Her scenery is the same 365 days in the year. It is the same old get-up-in-the-morning at four o'clock, put on the hominy, put on the bacon, put on the children's clothes and prepare them for school, milk the cow and feed the chickens; then put on dinner and get that fixed, and then supper and get that fixed; and then next morning at four o'clock it is the same old story again, and that's the way it goes.

That is my experience about it. My wife is a red-headed girl, and not so bad even for that. (Laughter). We had been married for about three years, and I began to observe that things weren't going quite right, she was fussing about the chickens, cut-worms were cutting down the cabbage, and beetles were stinging the beans, and the old cow wasn't giving as much milk as she ought to, and things generally were wrong; and then I saw her abusing my old houn' dog. It wasn't much of a dog, but it was mine, and that was the thing that was breaking the camel's back, (Laughter), and I said to myself "There's something wrong here." I was just entering politics then, a young cub of a politician, and there was an old gnarled white-oak tree about a quarter of a mile from the house, under which was a white oak log, and there I used to go and pour forth living flames of eloquence on that old tree—and it's living still. I don't know how it managed to survive. (Laughter). And I went down there and started to cogitate and ruminate, and it occurred to me all of a sudden that if I had to look at the same pictures, even tho they were painted by the master artist of all the ages, for 365 days in the year, for ten years at a time, I would go as crazy as a bed-bug; and I went back to the house and said "You just hitch these two children out in the back yard, loan your old houn' dog to one of the neighbors, let the garden go to the bow-wows, and the chickens to take care of themselves, pack the trunks, we're going to the mountains." And we went to the mountains, way up in the Blue Ridge mountains in South Carolina, three thousand feet above sea-level—wonderful country—it is the only country I have ever been in that I didn't see a Ford automobile. (Laughter). And we hadn't been there more than a week, when one afternoon as the sun was sinking over the western hills I heard a cherry voice calling me from around the corner of the hotel, and she said to me "I want you to view the wonderful sunset." And it occurred to me that that sun had been setting back of our house for ten thousand years, and she had never seen it before. And the next afternoon she called me again for something or other, and as I came into view I saw her with her arms around the neck of the mangiest houn' dog in all the mountains—petting it; and then I said to myself "Surely, this change of scenery works a wonderful transformation in a human being."

And when I say that Henry Ford is a great benefactor, I mean to say this, that he made it possible for the farmer's wife and the farmer's daughter to break the monotony of their surroundings and to see a little something of the world. I asked an audience in South Carolina, in my own county, twelve miles from the capitol of the state, just as a matter of curiosity and for information, this question: "I have often heard the assertion that there are farm women within twelve miles of the capitol of your state, sixty years of age, who have never had the proud privilege of standing within its shadows and saying to herself 'Here is concentrated the power of the people of South Carolina, and in these bricks and in this granite is reflected a part of my own power.'" I said "if there are any such, will you hold up your hands?" And a dozen hands shot up to verify that statement. Think of it! And then tell me that Henry Ford isn't a benefactor.

That comes of the old order of things. Not over 20 per cent of the farm homes in the United States have in them either artificial lights or running water,—the burden-lifter of the American farm wife.

The farmer is the only individual in the world that I know of who has a product to sell that has no voice in saying how much he will sell it for. If you take a bushel of wheat and bring it into this market, you will take what the fellow offers you for it or take it back home, and you will usually take what he offers you for it. Yet, when you go right around the corner to buy a loaf of bread, you will take the loaf of bread at the price that the other fellow names to you, don't you? That is true. That is of the old order of things.

There is no class of men in America who give more hours to a day's labor than the farmer, and yet, gentlemen, I am going to venture an assertion here, and it is that the average farmer in the greatest agricultural state in the United States, in the greatest agricultural area of the same size in the world, the state of Iowa, that the average farmer out of his crop for 1920 has not realized a profit more than sufficient to pay his taxes and meet the interest on his capital invested. Is that true, or not? Hold up your hands who think that is true,——Oh, darn it, this looks like a republican gathering. (Laughter and applause). What has all this resulted in, my friends? I am not painting these pictures to be funny. I say these little offside things to keep you from going to sleep. (Laughter). I would go to sleep myself if I was serious. For the first time in the history of this country there are more mouths to be fed in your towns and in your cities than there are folks working on your farms to feed them. For the first time in the history of this country urban population has overtaken and outrun rural population, the percentages being 51 to 49. And you ask why? It has all come because of the things that I have briefly sketched, and others. The virile young man or young woman of America is not going to work for a mere living—they demand something as a wage. Don't talk to me about this "Back-to-the-country movement," I am against it; and I am against it until you change the conditions so that your country school furnishes to your country boy and girl this same opportunity for an education that your town and city school does. I am against it until your country church is as fully equipped in furniture and convenience and in comfort, and in the ability of the man in the pulpit to expound the gospel, as they are in Des Moines, Duluth or anywhere else. I am against it until your country roads give to the mothers of this country an opportunity to visit their neighbors, as their sisters in the towns have the opportunity of visiting each other. I am against it until the privileges and the conveniences of country life are commensurate to the comforts and conveniences afforded by city life. And when you give me that, then I shall go back, but not until then. (Applause).

But that does not get us anywhere to talk about these things, does it? What's the trouble? What has brought about this? In legislation the farmer is not entitled to a single, solitary bit more than any other class, but, by the gods, he is entitled to as much as any other class. (Applause). The farmer has been taught to produce, with the result that he produces more per capita than any other farmer in the world, notwithstanding the general contrary idea. He is a remarkable producer, but an equally remarkable poor seller of what he produces. (Laughter). The energies of our institutions for fifty years have been directed to the problem of the increase in farm production. Will I shock you to say that as a student of economics, somewhat—not enough to hurt—I haven't gotten to the expert class yet—I don't give a tinker's blame about production at this moment, and for this reason, so long as the American farmer is productive enough not only to feed himself and his family, but to feed another family and a little more in town, and then export some to feed foreign families, the problem of production is not pressing, is it? What I am concerned with, and what to my mind is the great, outstanding, vital thing before the American people,—and I say that deliberately—I didn't say "farmer," I said "people,"—is that some system shall be devised by which he shall get his pro rata share of what I, the consumer, pay for the things produced upon the farm. That is the vital thing. (Applause). And when you devise such a system, you will not have to talk about production, because that system will mean profit to the farmer, and profit to the farmer means either one of two things—either he will take the profits of the farm and reinvest them in improved machinery, improved livestock, better homes, better barns, better everything around the home, carpets on the floor, pictures on the wall, music-box in the house, better education for his children, better churches, better schools, better roads, better rural surroundings; or he will become a retired farmer. Isn't that right, sir?

Whenever we make farming a business, as is manufacturing a business, or as is banking a business, or as is merchandising a business; whenever we look upon our investment in our farm and our investment in labor, and our investment in brain in our farm operations, as a capital investment, as the banker would look upon it, or the merchant or the manufacturer, then we shall begin to figure what is the return upon our capital investment, and if the return is a reasonable rate of return upon the investment, we are going to be contented and prosperous. If it is not, then this tendency of the young country woman and the young man to turn their backs upon the tender scenes of their childhood, to go into the cities and towns with high hopes in their hearts, which are too often turned to ashes on their lips, will continue.

Well, what are we going to do about it? What is the remedy? No use to put up a straw man and just throw rocks at him. You cannot hit him in the solar plexus and knock him out, there is no use to put him up, is there? First let us eliminate all of the unnecessary factors in our processes of distribution. Listen, my friends! From the time a seed of cotton is planted—and you know more about wheat than I do and you can figure it out yourself—and it comes back to me in the form of this cotton sheet, fourteen different people have had their hands in the pie. That is the truth! I challenge anybody to challenge my statement of facts. I am great on telling the truth if it doesn't hurt me. (Laughter). You know I can afford to tell it, because I am not running for anything. (Laughter)

Second: Standardization,—That is a big word very much over-used,—of all agricultural products into grades and classes, that the original producer, the farmer, may know accurately what he has to sell.

Third: The warehousing in elevators or warehouses of all warehouseable agricultural products in such quantities as are necessary to bring about the most orderly distribution of farm products,—which means, that, after all, the vital thing lacking to make agriculture as prosperous as it deserves to be, is a system for the orderly marketing of farm products. Mr. Simpson, you haven't got any such system now; there isn't any system of marketing of farm products, it is a hodgepodge affair. Throw it overboard! Get to it first, the devil take the hinder-most. That is the way it is in cotton, and I know it is the same way in wheat and corn.

What is the result of this system? Rather the lack of system of marketing farm products? First, you place a tremendous strain upon your transportation facilities and compel the railroads—Listen!—and compel the railroads to keep up an organization for twelve months in order that it may be prepared to take care of the moving of your crops in a period of four months. Isn't that right? You cannot build up an organization for a period of four or five months' service, and then discharge it, and then hire it again. If you are going to have an efficient organization, you have to have one which insures to its employees steady and renumerative wages, haven't you? What does that mean? That means that you should ship to pay the burden. You pay the freight. More than that, it means that at certain seasons of the year, the transportation facilities aren't adequate even to meet your situation, and your corn and your wheat and your cotton lie upon the platform to become the loser because of weather-weights.

Second: It puts a tremendous burden upon the financial ability of the country to handle the situation. The banks all over the country in August begin to husband their resources and their reserves to meet the crop-moving season that begins in September and usually ends about the first of January, for during the four months mentioned 75% of the staple agricultural crops like cotton, corn, wheat and oats leave the hands of the farmer and are marketed.

Third: This system results in the annual Autumnal dip in the price of farm products. If you should take the figures like I have done, you can take a period of 25 years and go down the line, and with one single exception—and I have never found out why that is an exception—you will find that the prices of farm products during the four Fall months of the year are the lowest, and that they are highest usually along in the early spring and late winter. Who loses that? Somebody said the other day that it was easier to climb a tree than it was to slide down a tree. Well, now, that fellow never had lived in the country—I have. It is much easier to slide down a greasy pole than it is to climb it, and if you don't believe it try the experiment out one day. So that, when, on account of your lack of system of marketing, the prices of your products are artificially depressed during these four fall months, your struggle to get them up the greasy pole is all the harder and you are the sufferers. You cannot escape that, gentlemen! Yau connot escape that!

And even if we reason that, my friends, you have this, as a fourth proposition,—and I will illustrate it. If the farm women within a radius of ten miles from Des Moines should all conclude to bring in their eggs tomorrow—I shouldn't say tomorrow, I should say in July, because if their hens aren't doing any better than mine they wouldn't bring in any. (Laughter) And you know, this thing of my hens and yours going on a strike has made me against all strikes, for I see what it can do to folks. But if they bring their eggs in in July and offer them on the market, and there is no other outlet for them than the market in Des Moines, I venture to bet my bottom dollar that they would break the price of eggs that day from ten to fifteen cents a dozen, and yet in four months of the year we are asking the buying and absorbative power of the world to take over 75% of the things they need over the period of twelve months. What is the result? Your autumnal dip, again. All right, so much for that!

What is the trouble, my friends? In the study of any agricultural problem by any man who can reason, you always get to the point where you say that the prime trouble is a lack of a system of marketing, and when you get to that point and you begin to step out a little bit, you always run up against the proposition that you cannot have a system of orderly marketing unless you have some kind of a different system of financing the farmer. (Applause) So there you come to the vital thing of my little talk tonight, the financing of the farmer. You cannot have all these things I have been talking about without money, can you? You cannot even buy a Ford automobile without money. You cannot build up a system of sane marketing unless you have a system of credit peculiarly adapted to the peculiar needs of agriculture. Listen! We have got two systems of financing in this country at this time,—one the Federal Reserve System, devoting itself to commerce almost entirely, and the other system which undertakes to care for the long-term credit needs of agriculture, the Farm Loan Act.

The banking system, before it was supplanted by the Federal Reserve Act, carried within its provisions no recognition of the needs of agriculture for a different kind of credit to that of commerce. The Federal Reserve Act did, and does, in section 13 carry such a recognition of that difference. The banking psychology, and the banking machinery, of the United States has been built up to meet the needs of commerce. That is, a piece of machinery which handles a short period-maturing paper. Why? If you will take any first-class retail merchant down here in Des Moines, you will find that he practically turns over his capital investment once every sixty or ninety days, and therefore he needs his paper to mature every sixty or ninety days. And therefore a banking system built up to meet the needs of commerce recognizes and is predicated upon a paper maturing in sixty days, and that is what we have in the Federal Reserve System.

The banker himself, through long years of training, is averse to tying up his capital in long-term paper, and for the very good reason that if a banker tied up his capital stock and his surplus of $50,000 in farm mortgages maturing in five years, his bank would go into bankruptcy before the first mortgage matured, unless he tried to run it without paying anybody any salaries. The banker makes his money for his stockholders by the quick turn-over of the bank's liquid assets, and he doesn't want, and it is not good banking, to tie up his money in long-time paper.

Now, section 13 did this. I was in on that game; I was one of a half dozen men who drew that section, because I thought I had some little appreciation of agriculture, and I think it has been of immense benefit to the farmers, but it has not worked out just as I expected it would. Section 13 says that a farmer's note, when secured by a warehouse receipt, with maturity of six months, may be rediscounted through the Federal Reserve System. That was a recognition for the first time in a national banking act that there was a fundamental difference between the credit-needs of agriculture and the credit-needs of commerce; but the difficulty there, my friends, is this:

First: Your period of maturity is not long enough. The turn-over period of a farmer's capital investment is 365 days in the year; it is a period of twelve months, and he therefore should have a paper with a maturity-day certainly not less than twelve months.

The other fundamental difficulty, my friends, is that your farmer's note cannot be rediscounted through the Federal Reserve System except it is agreeable to the local banker. He is the first fellow who takes the first step. Let's not demagogue about this, my friends; we have no reason to do it; and that's why I am so tremendously interested in that Farm Bureau Federation and its officers, and my contact with them convinces me that they are not the type of farmers that want demagoguing, they want facts and results. (Applause.)

The bankers of this country, the great majority of them, are in the deepest sympathy with every movement which seeks a more profitable agriculture and a more congenial rural surrounding. Isn't that true? And the banker who calls himself a banker who doesn't feel that way, is no more of a banker than a telephone pole—not a bit more—he is a pawnbroker, that would skin a flee for its tallow. (Laughter and applause.)

What I want to see, my friends, is a system of farm credits which is the farmers' system, and which is an independent system, and which makes it unnecessary for him to bow the knee to any living human-being this side of Hades to get a loan. (Applause and cries of "Good.") And I say that in the utmost sincerity after twenty years of thinking on farm subjects. I farmed until about ten years ago, and I was trying it 500 miles away from home, and I went busted every year. It won't do; you have to stay on the farm! (Laughter.)

Can this be done, my friends? Can we work out such a system? You know there isn't anything new under the sun, after all. All things that are new, were at creation's dawn when Adam and Eve were making love in the Garden of Eden. Nothing new! It is only a new application of existing principles that create things that we sometimes call new, that's all.

Let's see, now! Listen, my friends—Am I tiring you out? (Cries of "Go ahead!") Let's see about this a minute! For ten years before the act was passed, there was an agitation for what is known as a rural credits act. Your fellow-citizen, Mr. Hogan, is now president of the Omaha Land Bank, and your other distinguished citizen, Captain Smith, is my colleague on the Farm Loan Board, and they are both red-headed —one a Scotchman and the other an Irishman. And then the act came, and what is the basis of that act? I assume, Mr. Simpson, that you have a full quarter-section of land. If it is in Iowa, it is good land. If he took his mortgage for the measly sum of $1,000 on the best section of Iowa land and undertook to sell it to a New England investor, and he went up there to do it himself, he would likely find himself facing a commission on inquiry into his sanity. (Laughter.) If the Pennsylvania railroad or the Frisco or the Rock Island should take one of its great locomotive engines and write a mortgage on it and take that mortgage up to the Exchange in New York and ask them to sell that mortgage, they would put the Pennsylvania railroad into bankruptcy, because they would at once agree that the president of that company was a crazy man. But under the Farm Loan Act, Mr. Simpson and Mr. Hunt and Mr. Cunningham and Mr. .Howard and Mr. Lever, and hundreds of other farmers in Iowa and Nebraska and South Dakota, get together their mortgages representing millions of dollars, and they put them into the hands of a trustee appointed by the Federal Government, known as a Farm Loan Registrar, and even if he were to take these hundreds of mortgages representing hundreds of millions of dollars, and undertake to sell them in the markets of New York, they would put him in an asylum as a crazy man, too.

What is the mysterious thing that turns the trick? What is the key that opens the door? But when he issues against these mortgages Farm Loan Bonds and the bank at Omaha puts these bonds on the market as representing the mortgages back yonder—we haven't had any trouble, have we, Mr. Hogan, to sell them, until last March, when a great establishment in this country, with an over-weening love for the tax-payers of this great country, conceived the idea that the Farm Loan Bonds were tax free, and if we kept on at that thing the country would go skidding down the hill, and this institution instituted a suit in the Circuit Court at Kansas City. That suit was promptly turned down by the Circuit Court, and the case is now before the Supreme Court of the United States. It was argued today one year ago—this is my birthday, ladies and gentlemen—I don't look as old as you think I am, do I—the case was re-argued in October, and decision has not been handed down. And since that time we haven't been able to sell any bonds. We haven't been trying to, when we know we couldn't sell them. And do you know what has happened? And it is possible to say this because we are just talking together—if we had been operating during the past ten months, from March to this time, on the same basis we were operating in March, at the rate of 15-millions per month, we would have loaned to the farmers of this country 150-million dollars at 5½%, on an annual repayment basis for 34 years, and if the economists in whom we have confidence are right that one dollar of money will liquidate five dollars of debt, that would have meant through the Federal Land Banks alone, to say nothing of the 29 Joint Stock Land Banks, we should have loaned to the American farmers 150-million dollars, with which they would have been enabled in the country to liquidate 750-million dollars. (Laughter.) That is more money than I ever had. (Laughter.)

Listen, my friends! It is a serious thing, and I don't want the farmers of Iowa to forget, when we begin operating again, how it happens that this system has been tied up since last March, and who it was that instituted the suit. And I wish further to say, my friends, that the American people are so thoroughly committed to this system of long-time credit upon farm mortgages, a system which enables them to finance themselves with such ease, and which is enabling so many young men to acquire homes in certain sections of the country at least, this institution to the contrary, notwithstanding, that a farm loan system is going to be a part of the policy of this government,—the world, the flesh and the devil to the contrary, notwithstanding. (Applause.)

Now, what happens? What do we do? We get your mortgages together; we issue bonds, and we sell that bond and from the proceeds of the sale of that bond we loan you the money. It's easy, isn't it? It has worked to such an extent that we have loaned more than 440-million dollars in three years of actual operation. We have loaned through the bank at Omaha in the great state of Iowa 23-million dollars—more than any other state in the Union, except Texas, and she is not a state, she is an empire. (Laughter.) And I am proud to tell you tonight that Mr.

Hogan, your fellow citizen, tells me that he doesn't have a single, solitary delinquent loan in the state of Iowa, out of 23-millions of it. (Applause.)

Let's go one step further. What is the Pennsylvania railroad doing when it wants money? Does it try to float a bond on a steam engine or a shovel or a pick? Oh no! It gets together all its assets, its picks, its shovels, its engines, its rolling-stock, its good-will, puts a blanket mortgage on them and issues a short-term certificate on them and sells the certificate. The Southern railroad is doing that right now, and it is paying nearly 11% for its money. The Standard Oil Company, as I recall it, did the same thing not long ago. There is not a big business concern in the country that you can hardly mention that doesn't finance itself by the issuance of short-term certificates, or long-term mortgages, held against its collective assets. Isn't that true, Mr. Simpson? And yet we have two of the essential necessities of the human race. There are just three things you have got to have. You have got to eat, and that means bread; to go into decent society you must wear clothing, and that means cotton or wool; to live you have got to have something to keep you warm, and that means fuel. Those three things the human family of necessity must have; the other things come in mighty well, but you could get along without them. Adam and Eve didn't have any railroads, or even a Ford automobile. (Laughter.) And they got along first-rate; and I don't suppose they saw much more than we do with Ford automobiles. (Laughter.) Here you have got your wheat crop and your corn crop; and here we have got our cotton crop. The price of it has dropped from 42c a pound to 13c a pound. The price of your crop has dropper from $1.80 to 50c a bushel; and yet your experts from Ames, the greatest agricultural college in America (Applause and Cheers.), acting with these gentlemen, as is shown in this gentleman's paper, compute that the cost of producing corn is 93c a bushel in the state of Iowa.

If the Pennsylvania railroad can pool its assets and get money, why cannot we pool our assets and get money? What is our security? It is the best security in the world, because the human family must have it. Did you ever try to eat a steam engine? (Laughter.) Did you ever try to use a shovel for a shirt (Laughter.), or a pick for a pair of breeches? (Laughter.) On the other hand, did you ever try to go without bread long? Or did you ever try to walk down the streets of Des Moines without breeches on? (Laughter.) It is inconceivable to me, my fellow citizens, that the genius of America is not able to conceive a piece of machinery which will make available for credit such assets as cotton, corn, wool, wheat, and the absolute necessities of life. If we cannot do it, we do not measure up to that high quality of genius which I attribute to the American people.

And how will you do it? You have got the laws already; you have got the Grain Grades Act, both state and federal, that assures you a competent, impartial grading of your products; you have got your Warehouse Act, both state and federal. I was the author myself of the Federal Warehouse Act. Your grain goes into your warehouse, it is graded, it is insured, the warehouseman is bonded, the warehouse is open to the inspection of a federal or state officer morning, noon and night, as your postoffices are, so that there is always a guarantee of the parity of the receipt that the goods are back of it. If you undertake to sell one of those receipts, you couldn't do it in the money markets of the world. You might do it locally in a small way. It is not bated to get the big fish; it will get the minnows.

Let's take the receipts of hundreds of warehouses on wheat, for example, and pool them and take them from three or four states and pool them in what I would like to call a commodity bank in the hands of a trustee appointed by the federal government, or jointly by the state and federal government. If you want to let that commodity bank then issue its debentures, its certificates of indebtedness, with maturities of six, nine, twelve and fifteen months, and offer these for sale in the markets of the world, I will risk my reputation as a prophet that they will sell. There are other details which must be worked out, but that is the principle. And have I proof of that? (I cannot read as I could when I was 26—more is the pity.) This just came to me the other day from one of our bank officials in Spokane, Washington. "The Washington Wheat Growers Association, The Idaho Wheat Growers Association; 8% wheat gold bond; $100.00." This is a copy. The original is issued in the amount of $100, $500, and $1,000 only. There it is! The wheat growers of Washington and Idaho have gotten together and they have done precisely what I have been advising farmers to do for six months; they pooled their warehouse receipts and issued that bond against them. I thought I had his letter here, and I still think I have, but I can't find it; but I want to tell you what he says about it. He knew I was interested in this thing and sent it to me. I don't seem to have it; I brought it—my wife looks after most of my things. (Laughter.) At any rate, in his letter to me he says that notwithstanding the tightness of the local money market, you will be surprised to know that these bonds have sold quite freely upon the market. Now, if I know if a thing will work locally; if the principle will work locally on a small collection of wheat in the states of Washington and Idaho, what can be done with it in a state where, instead of having but ten or fifteen thousand bushels in storage, you had 100-million bushels in storage as security back of these outstanding bonds? Or if in states having, as we have in South Carolina, 20,000 or 50,000 bales of cotton in storage, and receipts issued against them; suppose we had 2-million bales in storage representing a value of 100-million dollars; don't you think we could sell these certificates? Somebody says "Yes, you could, but it would cost you 7%, perhaps;" this local one sold for 8%. Listen, my friends! I will lay this down as an economic truth: On a short-term loan, the interest rate is not the important thing. On a short-term loan, the getting of the loan is the important thing. Do you catch the difference? In other words, if the wheat growers of America, and the cotton growers of America, and the corn growers of America, and the wool growers of America, had a system in operation like this whereby they were enabled to get money for the next twelve months, the probability is that they would be saved not millions, but hundreds of millions in value. Do I make that clear to you, my friends! If so, I am going to pass on. This is the only practical plan which has occurred to my mind of working this thing out of getting a short-term credit for the farmers.

Now, if you want permissive legislation, as has been suggested, for people who have no collateral, that is all right, but you cannot protect safely a system of issuing credit unless there is security beneath the thing. Some body suggested that a lot of fellows get together that had no security, and let them organize themselves, and with that let the federal government loan 100-million dollars to the states and the states in turn loan the money to this aggregation of men without any security whatever, and I said to him, "Well, that looks good, but it is not good for this reason, the federal government won't do such a thing, and that's enough." (Laughter.) The federal government ought not to do such a thing, and that's enough in itself, for the reason that you cannot take naught plus 100-million naughts and get anything but naught in arithmetic—and I am not an arithmatician; but you can take actual values here in the shape of produced crops, which represent the investment of brain and brawn and capital, and with that as a basis we ought to be able to do for the farmers of this country—let's put it the other way: The farmers of this country ought to be able to do for themselves with a little government supervision what the great corporations of this country are doing every day. (Applause.)

And now, my fellow citizens, just one other thought. This cannot be done, and many other great constructive things ahead of American agriculture cannot be done, except through the closest organization of the American farmers themselves. It is a word much misused "co-operate," "organize," and "get-together," but hasn't the time come, my countrymen, when you see the necessity of putting your thought and your money and your energy in the jackpot with your neighbors that all of you may save, or else that each of you may hang separately? And you have got to do this, too, my friends, under wise leadership. You cannot do it with 15-cent heads; you have got to select the very best men that you can find in your class, and then be willing to pay them enough salaries that if necessary they can give up their own business to take care of yours. (Applause.) I like your Mr. Howard! He is an upstanding fellow; he has got a keen eye; he has got a square jaw, and, more than that, he has courage and common-sense—John R. Howard. (Great applause.) I like Mr. Cunningham, and I like Mr. Hunt, and I like all of you who are members of this organization—why, you're good-looking enough to make me think I am talking to a South Carolina audience. (Laughter and applause.) And when you find that leadership, my friends, keep it, for this reason—without it you are liable to fly off at a tangent, follow some will-o'-the-wisp, listen to the cooing of strange doves; you are liable to get your feet off the ground. You know, it is said that in his great wrestling bout with his powerful opponent, whose name I cannot recall just now, Hercules was in great danger of being defeated throughout the contest, until finally he got a kind of head-lock on his opponent and got his feet off the ground, and when he got his feet off the ground he was as helpless as a babe and was conquered.

The thing of all things—and I am speaking with all the earnestness of my nature, because I believe in your organization—the thing of all things that is most dangerous to you is that somebody, some how, might get your feet off the ground and throw you. Mother Earth is a mighty good old steadier—stand on her, be sensible, be sane; don't ask Congress to do the impossible things; don't ask Congress to do for you anything that you wouldn't want Congress to do for any other class of American citizens. (Applause.) But demand of Congress—No, I wont' say that! I was in Congress 18½ years, my friends; I went there when I was a boy (Laughter.); I grew up in that body. I have served with more than 2,000 members of Congress, most of whom have gone, and there is no man beneath the stars who has a more profound respect for the honesty, the integrity, the patriotism, and the good sense of the American Congress, whether it is democratic or republican, than I have. (Applause.) And I ask of you not to demand these things of Congress. What you need to do is to let Congress know that you have a sane, sensible, just proposition, and that you, the real American farmers, want it, and Congress will give it to you only too gladly—too gladly.

My friends, some eight or nine years ago, on the fiftieth anniversary of the battle of Gettysburg, with some friends I visited that historic field. It was a quiet Sunday morning; the church-bells were calling the children to Sunday-school, and down the streets could be seen fathers and mothers taking their children to school to be taught the beauties of the Bible. On Seminary Ridge I stood and looked across the valley, with its ripening wheat, the cherries were just to turn, the flowers were in bloom, the birds were warbling their sweetest music, and my mind flashed back fifty years in retrospect, and I saw belch out from the gray lines across yonder a flame of smoke and fire, and the opening gun at Gettysburg had been fired; I saw a dashing cavalry officer draw from its scabbard his sword and order the onward charge of 18,000 of as gallant soldiers in gray as ever trod the surface of this earth; I saw them come over this wheat field in double-quick time; I saw one brave lad from Mississippi leap the breastworks of the boys in blue, located where I was standing, and I saw him brained with the butt of a cannon. The gray lines withered, fell back, reformed and charged once more, but the steadiness of the boys in blue was more than the dashing chivalry of the boys in gray could overcome. When it was over, the Union was saved. Shortly thereafter that mysterious, melancholy man of history, a type unto himself, gave to the world on that great battlefield a classic that will live as long as the human heart beats in unison to real eloquence, and I sometimes think that it was a strange thing, almost an uncanny thing, that this awkward, gawky, unprepossessing man in personal appearance, of poor parentage, should have been brought into the world, and should in that critical period in our local history, become the president of the United States. And as time went on and the waves of war from over the ocean engulfed us finally, and when we had sent our 2-million boys across, and when these boys, the sons of those men in gray who charged under Pickett, and the sons of those men in blue who stood like the everlasting granite of the hills upon which they fought, the sons of these men, from the poppy fields of Flanders to the very gates of Sedan, marched on, on, and never backward, until the impregnable lines of the enemy were broken and peace on earth had again come upon us, it made me think that, after all, the coming of Abraham Lincoln into the world was, perhaps, for the reason that through a united people of the United States the civilization of the world might be saved.

I thank you! (Great applause)

ADDRESS OF C. L. HARLAN, UNION STOCK YARDS, CHICAGO, ILL.

Mr. President, Ladies and Gentlemen of the Iowa Farm Bureau Federation:

The speaker has been working since the first of last March as a live stock marketing investigator for the Iowa Farm Bureau Federation and the Corn Belt Meat Producers' Association. His employment as such was the result of an agreement between the two organizations that the livestock producers of the state ought to have some one who should devote his time exclusively to studying the livestock marketing situation, at least in so far as Iowa interests are involved, and be prepared to represent or defend those interests wherever it might be deemed necessary.

Just what activities or responsibilities the position should include was not determined at the time, but it was rather to be left to the development as circumstances might make desirable. But as the greater part of Iowa livestock goes to market through the Chicago livestock market, and as that market is the center at which livestock prices for the surplus production regions of the west are largely determined, it was thought that it might be advisable to have an office there and make that a headquarters, at least, for the work. The speaker, therefore, went to Chicago and spent a month in going over the situation with a view of determining whether it might be considered worth while to establish such an office. At the end of that time he reported to the supporting organizations that he thought it would be worth while to center the activity in the Chicago market and to devote his time largely to a first-hand study of conditions as they there exist. He was instructed to make arrangements to that end, and the work was started about the first of April, although office accommodations could not be secured until the latter part of that month.

In a general way, the character of the work to be done was to be along three lines. The office was to act as a kind of a bureau of investigation into complaints as to service or treatment made by Iowa shippers concerning transportation or handling and selling agencies, either enroute or at the market, and to secure such explanations, rectifications or changes as might be thought desirable. The speaker was also to be an authorized representative of the two organizations at conferences, investigations or hearings which might be concerned with matters involving livestock interests in particular, or marketing problems of agricultural products in general.

The third activity was to be the making of a detailed investigation and study of some particular class of livestock to demonstrate the possibilities of such intensive methods and the desirability of devoting the time and expense to similar work with other kinds of stock. This was to include the securing of all possible information as to receipts, prices, prices of the derived products, the relations between receipts and prices, and between the prices of products and of the raw material. The class of stock chosen was native beef steers, including yearlings. This choice was made because of the generally unsatisfactory conditions existing in the fed-cattle industry, and also because Iowa is the leading state in the marketing of these cattle, and especially of the better grades, which are exclusively a grain-fed product.

The work done has been very largely along the three lines as above enumerated. But the development of the office, or bureau, as it is called, as a sort of clearing house for shippers' complaints has not grown to the extent that it was thought it might, altho some little time has been given to investigating both individual and general complaints as to railway service and feed charges, and to securing explanations as to items in account-sales, etc. The reasons for the failure to make use of this service have not been so much that there were no grounds for complaints, but partly that shippers were not generally aware that such a service was at their disposal, and mostly that because the great declines in prices in the process of general commodity price deflation have brought such serious losses that shippers have become more or less insensible to minor marketing disabilities and disinclined to complain of them.

So far as transportation conditions are concerned, there is no doubt that there have been fewer grounds for complaint since the middle of this year than in past years, the great falling off in the total amount of traffic and the increased labor efficiency having put the railroad companies in a much better situation for handling the shipments of livestock. There are still in some sections of the state restrictions on loading and shipping that make the movement more difficult than in pre-war days, but there are favorable indications that these will be eliminated shortly after the new year and that livestock schedules and marketing movement will show progressive improvement.

There has been very considerable opportunity for activity along the second line indicated, that of representing Iowa livestock interests at meetings, conferences, etc. There have been a great many of these during the past nine months, and for a variety of purposes. Among those attended have been livestock-shipping-loss prevention meetings, general marketing and special livestock-marketing conferences of the American Farm Bureau Federation, livestock-financing conferences, railroad-rate hearings, stock yards and packing-house employees wage hearings and numerous smaller conferences.

But the greater part of the activity, and the one that gives promise of the most valuable permanent results, has been devoted to the making of the special study of the native-beef-steer situation. This has involved the securing of all available information as to the market movement prices, and disposition of this kind of cattle. The object of the work was to try to get dependable information as to the actual receipts by grades, and especially of the better grades, of native steers, which would include all these animals grain-fed coming to the Chicago market from the corn belt region.

Such information has never been secured before and no attempt has ever been made to secure it. Corn-fed cattle have been considered heretofore as only a part of the general run of cattle, and it has never been considered worth while to study them as a separate kind produced under special conditions involving peculiar risks not found in the production of other kinds of cattle, and the prices for which are determined by other forces than those that determine the prices of the general run of cattle.

For the purpose in mind, the following schedule of information was thought desirable:

The total receipts by grades. This was wanted as showing what proportion of the cattle receipts at the Chicago market was made up of this kind of steers and how this proportion was distributed among the grades of choice to prime, good, medium, and common, and low-grade.

Receipts by weight. This to show the numbers of the different grades by weight and the relationship between grades, which means quality and weight. All previous information of a similar kind had been based on weight and not on quality, but by establishing some relationship between weight and quality this information might be rendered more valuable than it now is.

States from which shipments originated. To show the comparative importance of different states in the production of such cattle, and the time of year that different grades came to market from different states.

The buyers. To show the disposition made of the different grades of cattle, whether bought for Chicago slaughter or for eastern shipment, the number bought by large packers and by small slaughterers, also the amount of speculative trading, and the proportion bought for stocker-and-feeder account.

To correlate this information as to receipts and sale, certain information was desired from the packing interests on enough lots of cattle to make them representative of the different grades. This included, as to selected lots, the live price, the dressing-yield or beef-yield, the allowance for by-products, the killing costs, the grade of the resultant carcasses, and the current price for similar grades of carcass beef; also weekly reports as to the prices at which chief by-products, especially hides and tallow, were credited.

This information was desired to try and establish the relationship between cattle grades and beef grades, if any exists, so as to know whether different grades of carcass beef are derived from similarly named grades of steers or whether there is not a tendency for the grading to improve from the stockyards to the coolers. It was also wanted to assist in the establishment of a better basis for grading cattle in the yards which would be in the direction of fixing cattle grades in large part in terms of dressing-yield and thus give them a more fixed and determinable basis. A third reason was to try to get some exact information as to what extent cattle are bought at fairly uniform prices in different sections of the yards for similar grades on the same day as throwing light on the question as to whether they are really bought on the basis of their actual value or whether the question of price is not more a result of trading skill of buyer and seller, and whether this skill and ability is of fairly uniform level or shows a considerable variation.

Further, this information was needed to make possible a fairly exact charting of the prices of cattle and of the prices of the resultant beef and by-products to show the variations in the spreads between these, thus making it possible to consider whether there tends to be an average spread—what should be considered as a reasonable spread, and the change in the spread under changing conditions in the cattle and beef markets.

And, finally, the information would be useful in throwing light in a general way on the financial results of the packers' operations in handling different grades of cattle, whether these tended to be fairly uniform on a given basis, as a per cent of the cost of the live animal, as between different grades, or whether there is a considerable variation, and which grades are the more generally profitable.

This is a brief outline of the information thought desirable to a fairly full understanding of the market movement and market disposition of this selected kind of cattle. After a consideration of the possible sources for obtaining the information with regard to receipts, it was decided that this could only be gotten in the form and detail desired from the account-sales of the various commission firms who sell the cattle. The matter of thus getting it was taken up with the officials of the Chicago Livestock Exchange and a letter to the various member firms was obtained recommending that they give or make available the information desired. All of the firms were then visited and the greater part of them expressed a willingness to make it available, provided it did not involve any additional work on the part of their office force, although few could see the utility that it might have. Some firms refused to furnish it, and in the work of getting it other firms have made it so difficult that entirely exact results have not been possible; but it is probable that as obtained it is 90 to 95 per cent exact with the better grades—the good and the choice, and 80 to 85 per cent with the other grades; the poorer the grade the greater the lack of accuracy.

The information is obtained daily by going through the account-sales of each firm for the previous day and recording it on specially prepared slips, each sale being kept separately. This includes the number of head, the total weight, the price, the state of origin of the shipment, and the name of the buyer. On the basis of the price quotations of the Bureau of Markets for the day, the lots are graded as choice, good, medium, common and cheap, and then each grade is listed on special ruled sheets making possible the compiling of them in such detail as is thought desirable. This is kept in considerable more detail for the better grades than for the poorer. For the former it includes the weight within four classes: Below 1100, 1100 to 1300, 1300 to 1500, and above 1500. The state of origin, if one of the six most important—Iowa, Illinois, Missouri, Nebraska, South Dakota or Indiana, with all other states under one heading; and the buyer. With the poorer grades, the record by states is not so complete nor is the division by weights as close. The totals from these daily sheets are carried to weekly ones, and these to monthly, and then to continuous ones by months, so that information as to the receipts during a longer or shorter period is readily available.

The information that it was hoped to obtain from the packers has not yet been secured. The matter of getting it was taken up first with two of the packers directly, and afterwards, at the suggestion of one of them, through the Institute of American Packers. Schedules of the desired information were made out and forwarded to the Institute and submitted by the director there to several of the packers. Some tests were run to learn what might be done in securing it, but the result was not deemed sufficiently representative to justify its use—at least, this was the conclusion of the packer making them. Several conferences were held to discuss the matter, but they did not get anywhere and the attempt to secure it in this way was given up. The packer representatives thought it was a matter that ought to come before a joint committee of producers and packers, and they wanted any further action postponed until such a committee should be appointed—the producer members by the president of the American Farm Bureau Federation (as the old producer-packer committee when it disbanded recommended that a new committee should be thus designated). Pending the appointment of such a committee, and to try to establish a satisfactory basis for the activities of such a committee if appointed, a memorandum of what was considered a fair statement of the relationship to be maintained between the producers and packers, which included the reasons why the securing of information such as this was deemed essential, and making the securing of it a pre-requisite of any attempted joint activity, and also a schedule of the information desired with regard to this particular class of animals, was drawn up and was forwarded through the president of the American Farm Bureau Federation to the heads of the four large packing organizations at Chicago for their consideration, with a request for an unequivocal answer as to whether they were agreed to the statement in the memorandum and would be willing to give such information as was thereon indicated. General replies were received with promises for more specific ones in the near future.

In the meantime the livestock marketing conference was held in Chicago which resulted in the recommendation that a general committee of fifteen be appointed to consider all questions having to deal with livestock marketing and kindred subjects and to outline a policy and program to be followed, and it was decided to let this matter await the appointment of this committee and then bring it before them and get their endorsement of the whole proposition. If this is secured, the subject will be opened again with the intention of finding out just what is going to be the attitude of the packing interests and thus know whether there is anything to be hoped for in the appointment of such a joint producers-packers committee. For it is the opinion of the speaker and of the officers of the two organizations supporting this bureau that unless some such basis for a joint activity of the two interests can be secured, there is little use of undertaking it, and that from the producer's standpoint it is preferable to have no such relations with the packing interests if they are to be in the future, as too often in the past, merely informal discussions or expressions of opinion, and where the producers' representatives are handicapped by a lack of knowledge as to the facts and must accept such statements as are made without the means of checking them up.

Although this failure to get the desired information as to the packing house end of the industry has detracted somewhat from the value of the work that it was hoped to do, from the producers' point of view this was by far the least important element in the situation. As throwing light upon the marketing problem, the information as to the market receipts and their distribution from week to week and month to month is the most needed. And this has been obtained in a fairly satisfactory way and has been compiled in such form as to be of the most use.

On the basis of this information and daily price fluctuations, continuous graphs are maintained showing the daily fluctuations in the prices of different grades of steers and of similarly named grades of carcass beef. With these are included the weekly receipts of the different grades, the total weekly receipts at Chicago and at the seven leading surplus markets. These show the relation between the wholesale beef market and the cattle market and the effects of the different grades on these prices; also to what extent the prices of these grades follow a fairly independent course according to the receipts and to what extent they are influenced by the total receipts of cattle both at Chicago and at the seven markets. Also included are the prices of different by-products from week to week showing how these influence the prices paid for cattle. The graphs of good and choice steers have been enlarged and arranged by months and colored to give some notion as to what these show and how the work is done.

The tables of receipts are as follows.

CHOICE

92,047			
Heavy	76,396		
Light	15,651		
Iowa	42,260	45.9%	
Illinois	34,614	37.6	4.4%
Missouri	5,780	6.3	of
Nebraska	3,154	3.4	Total
South Dakota	1,940	2.1	14.1%
Indiana	2,830	3.1	of
Others	1,469	1.6	Steers
Packers	51,703	56.2%	
Shippers	34,926	37.9	
Others	5,418	5.9	

GOOD

26.4% of Steers 8.3% of Total

171,758	Heavy	140,521
	Light	31,257

Iowa	84,707	49.4%
Illinois	53,668	31.3
Missouri	12,958	7.5
Nebraska	5,076	2.9
South Dakota	3,744	2.2
Indiana	6,263	3.6
Others	5,342	3.1

Packers	97,240	56.6%
Shippers	54,292	31.6
Others	20,226	11.8

MEDIUM

29.5% of Steers 9.2% of Total

192,253

Iowa	96,253	50.1%
Illinois	49,550	25.8
Missouri	23,514	12.2
Others	22,936	11.9

Packers	112,831	58.7%
Shippers	......	....
Local Butchers	50,237	26.1
Others	29,185	15.2

COMMON

131,674

Iowa	55,083	41.9%
Illinois	31,519	23.9
Others	45,072	34.2

Packers	41,096	31.2%
Shippers	.....	....
Local Butchers	34,500	26.2
Stockers and Feeders	.....	....
Others	56,078	42.6

CHOICE

4.4% of Total

April	12,877	4,448 5,316 3,060		14 %
May	13,921	3,451 3,064 3,541	3,172	15.1
June	23,419	3,285 4,637 4,798	6,656	25.4
July	14,570	5,214 3,023 3,501	2,346 2,529	15.8

August	12,987	2,853 2,842 2,788	3,067	14.1
September	7,993	2,112 1,415 2,660	1,663	8.7
October	4,308	1,580 1,753 1,184	891 480	4.7
November	1,972	502 389 414	421	2.1

GOOD

8.3% of Total				
April	16.4%	28,180	5,618 13,125 8,917	
May	26.7	45,893	11,338 13,380	13,011 7,242
June	16.2	27,615	3,711 3,902	6,475 7,990
July	13.2	22,681	6,947 4,836	6,776 5,896 3,863
August	9.8	16,827	3,843 3,343	3,326 3,353
September	5.9	10,105	4,315 2,339	3,165 1,755
October	4.6	7,986	1,502 1,981	2,507 1,636 1,830
November	7.2	12,373	2,693 1,285	3,109 2,590

MEDIUM

29.5% of Steers				9.2% of Total
April	14.7%	28,411	4.800 13,393	9,573
May	22.4	43,105	10,168 10,583	10,211 10,807
June	12.9	24,896	3,623 4,303	5,924 5,161
July	11.5	22,033	6,547 4,632	6,485 4,816 4,438
August	13.3	25,618	6,089 5,405	6,482 4,684

September	7.3	13,908	4,399 3,653	3,625 3,164 3,359
October	5.3	10,245	2,025 1,906	2,138 2,842
November	12.5	24,087	3,923 6,314	8,086 3,312

COMMON

April	19,092	2,053 9,357	7,388
May	22,491	5,213 8,081	4,905 3,750
June	16,407	3,174 3,216	3,157 3,880
July	11,955	4,538 2,239	2,382 2,839 2,937
August	16,255	2,478 2,257	4,452 4,823
September	14,430	3,352 2,879	4,151 4,128
October	11,957	2,164 1,861	3,908 2,314 3,874
November	19,077	5,744 4,837	4,421 2,299

CHEAP

63,612

Iowa	16,943	26.6%
Illinois	7,751	12.2
Others	38,913	61.2
Packers	4,484	7.0%
Shippers	.....	....
Local Butchers	14,865	23.3
Stockers and Feeders	.....	....
Others	44,263	66.5

Such information as this is needed as a statistical basis before any successful effort can be made to put the production of these kinds of cattle on a more satisfactory footing. The production of corn-fed cattle is a separate activity, the amount of which can be arbitrarily increased or restrained by concerted action of the men engaged in it. It is possible to learn the receipts of these kinds of cattle and determine the effects of varying receipts on prices and thus know about how many the market is able to absorb and to conduct production in the light of these facts. It is also possible to learn something of the past seasonable and more or less normal demands for different grades of steer beef and to observe the effects of competition of other kinds of beef and of other kinds of meats on the consumption and prices of these particular grades. The only way that any control can ever be exerted over the price of these or any other cattle is by some control of the production and the distribution of the production on its way to market, but before any such control can be successfully undertaken information showing what has been the past production and distribution must be available. Information such as has been here obtained is the start toward that end.

The history of the production and distribution of these grades of cattle during the past year as these tables and graphs plainly indicate compels the following conclusions:

First: The production, if left to individual initiative and uninformed and undirected as at present, and largely influenced by changing prices, will not result in such a co-ordination of supply to demand as to insure a price approaching the cost of production.

Second: That the supply as produced and available for market within a determined period, is not apt to be marketed in a manner to bring the highest total price or the highest average price.

Third: That there is no possibility of stabilizing prices without some method of controlling the market movement so that the available supply shall be fed into the market in a fairly uniform stream.

Fourth: That the production of choice cattle is that of a luxury product, the consumptive channels for which are comparatively limited, but which will take a limited amount at a high price. Production of more than this limited amount is apt to result in prices financially very unsatisfactory, and such production is certainly industrially uneconomic, for it involves the use of large amounts of concentrated foods to produce a quality and not a quantity product which has only a very limited market appreciation as a food for epicures; and it would be much more desirable that those feeding stuffs be devoted to a more staple and more efficient production unless the consumptive demand will amply justify in financial returns their use in this luxury production.

In making this study of the cattle situation, the speaker has devoted some time to viewing at first-hand the activities in the alleys, trying to be out for an hour or two every morning during the busiest trading period. An attempt is made to visit each section of the yard, to talk with both salesmen and buyers, and to keep in close touch with the trend of the market. This is done for a number of reasons. No one is justified in trying to pass judgment on marketing conditions unless he knows the practical and technical operations of the market, as well as the general and theoretical, and the only way the former can be learned is by coming in close daily contact with it and watching it in actual operation with enough knowledge of the situation to know what is taking place. It is only in this way that one can form a judgment as to the practical efficiency of the method, whether it is accomplishing its purpose in the most direct and most economical way. One interesting problem is to try to determine the comparative tactical situations of sellers and buyers under changing conditions of the market and how each side works under those changing conditions. This cattle market is almost exclusively a consignment market and the animals have to be sold quickly and it is very seldom desirable to carry any of them over in hopes of a better market. Theoretically, the advantage in such a market is with the buying forces, for they do not have to buy in the same sense that the sellers have to sell, and especially is this the case in a market where a great part of the buying power is concentrated in a few hands. And in actual practice this is the situation—which means that the demand side of the price-making force is almost always in better position to assert its interest than is the supply side, because at the end the seller is always a forced-seller and the buyer is not a forced-buyer. This does not mean that there is a lack of competition, for there are plenty of evidences of it. With a good strong beef market, and especially with an advancing one and limited supplies of cattle, the competition for the available raw material is quite keen and the price can be marked up easily; but with a big run of cattle, particularly in the face of a declining beef and by-products market, the competition among salesmen to sell is even keener than that among buyers to buy, in the other situation, and the breaking of the market is an easy matter. And even with small receipts, if the beef market is going bad, salesmen are powerless to get any advantage out of the cattle-supply situation when confronted by indifferent buyers. And this simply means that in a consignment market for perishable commodities the buyers have a superior position and can always push the risks on the market back onto the furnishers of the supplies.

Another aim of this market observation has been to estimate to what extent cattle are sold at fairly uniform prices for the same grades in different sections of the yards on the same day; that is, whether they are bought largely according to their value as raw material or whether the price varies according to the changing judgments as to different salesmen as to the market and as to values. This is not an easy thing to do for it is quite difficult for one who is on the market every day and seeing different grades of cattle every day to carry comparative impressions in the mind's eye as it were, from one alley to another and one section of the yards to another, and be able to say that one lot sold higher than another. Undoubtedly the buyers are better equipped to pass a judgment as to beef values than are the salesmen, for they see many more cattle in the course of the day, and they have their daily killing-sheets which show them the beef results of their previous purchases, and their positions are much more dependent upon their knowledge as to actual values in terms of product. Indeed one of the weaknesses of the system from the producers' and salesmen's standpoint, is that there is no method of check-up to know whether a particular sale was in line with the market, or not. The producer can only judge as he sees a few other sales made, if he does, and under the handicap of seeing the various lots of cattle under strange conditions and under an unknown variety of market presentabilities. Cattle in the yards are so unstandardized, and price is to such an extent a matter of chance, that with a salesman of trading skill, knowing when to sell and when to hold a kind of intuitive "feel" as to the state of the market are much more valuable qualifications than expert knowledge as to cattle. This trading skill, as well as knowledge of cattle, is far from uniform among the selling forces so that it is no unusual thing to see sales that look out of line even on a steady market and on a bad market where the buyer's advantage is pushed to the full, and competition among salesmen to get rid of their consignments is almost panicky, many such sales are in evidence. The great disability, though, is not in the lack of ability among salesmen varied as this may be, but in the system itself that sends an unregulated supply of a commodity to market where it has to be sold within a very limited time.

I pass now from the somewhat detailed description of the activities of the bureau to a more general consideration of the marketing problems that confront Iowa producers. Iowa is the first state in the production of cattle for slaughter and of hogs, and hence the most interested of all the agricultural states in the improvements in the marketing of these two kinds of stock. The problem that has to be considered and solved is to market this stock so that it will bring the highest net returns to the producers, and among various possible methods the one that does this will be the one that will finally prevail. But along with this problem arises another question, whether in the distribution of this highest net return, producers are to fare on a basis something approaching equality for similar products produced under similar conditions, or whether it is to be distributed unequally, due in small part, perhaps, to better market judgment or firmer financial position in awaiting a market but in great part to chance; whether producers as a whole are willing to forego the possibility that each has of being among the smaller number that got the higher return under the present method of sending these commodities to market in order that the total and thus the average, return may be larger, which involves the matter of trying to devise some methods of stabilizing prices by means of controlling the movement to market. For it may be set down for certain that until some such method of controlling the flow of the available supply into the market hopper is established, the highest possible net return for the whole production cannot be obtained.

But before touching upon the question of controlling the movement to market, some consideration should be given to the nature of the commodities to be marketed. The marketing problem has been confused because of the tendency to consider it the same for all classes of stock, this confusion arising from the fact that at the present time all classes are marketed largely through the use of the same machinery. Cattle and hogs, confining ourselves to those two kinds of stock, are handled by the same local marketing agencies, either shipped by the producers, sold to a local buyer, or handled by a co-operative shipping association; go in the same kind of cars to the same markets, are sold by the same commission firms, all organized in a single exchange, and are bought by much the same buyers; but the forces and conditions that influence or control their production, that determine their marketing, that decide the price that can be paid for them, are very different so that no more consideration of the machinery that handles them in the direction of improving it or even controlling it is a sufficient attempt at solving the problem of the best way of marketing.

As between cattle and hogs we have a situation something as follows: Cattle are very largely a source of supply of fresh meat which is a perishable commodity that must go into consumption rapidly, and the prices paid for cattle are determined on the basis of perishability, influenced by certain non-perishable by-products such as hides and tallow.

Hogs are the source of cured and, within limits, non-perishable products, and their prices are determined by the value and total supply of these cured products influenced by the changing values of a small per cent of perishable fresh meat products. Lard, bacon, hams, shoulders, ribs, fat pork, smoked sausage, are the cured products into which the most of the carcass of the great bulk of the hogs is manufactured; loins, spare-ribs, butts and picnics are the fresh-meat products.

Cattle are of many classes and with numerous grades within each class, and those grades are poorly defined and not generally established and difference in value between grades is large.

Hogs are limited to comparatively few classes and few grades, the classification being to a large extent in terms of weight, and differences in grades are not reflected in very large differences in price.

The products of cattle are largely unstandardized and are not sold under brands or trade-marks, and for this reason are sold largely on inspection—the buyer goes to the packers' wholesale house and selects what he wants after viewing the offerings.

The cured products of hogs are standardized to such a degree that they can be traded in on the produce markets and bought and sold for future delivery. That is, they are susceptible of being traded in by description. Other products are put up under trade names and in special brands and are sold on the reputation of those brands.

Because of the lack of standardization in both cattle and their products, and because quality and finish are such potent factors in price determination, and these cannot be readily and understandingly described, cattle must be handled largely on an inspection basis—the buyer must see the animals that he buys.

With hogs, quality and finish are comparatively small elements in determining the price range, and the approach to uniformity in the total supply is marked, hence the possibility of establishing standardized grades and trading by description is promising.

In the producers' hands, cattle on feed are quite a perishable commodity, for they deteriorate rapidly if the operation is suspended or reduced and the gain in weight scarcely never will pay for the cost of the food to produce it, but it must be accompanied by a continuous increase in price as finish is added. Under normal conditions, hogs will pay for the cost of the food they eat by increases in their weight, so that there is much less risk involved in holding them; also they can be marketed, after reaching a certain point, at almost any size without involving a very great price penalty.

Considering cattle by themselves, we find very considerable differences in the method of production and in the conditions that determine their market movement. In Iowa at least, three kinds of market cattle can be distinguished, (1) by-products of the dairy industry, such as veal calves, discarded cows and bulls, and some heifers of a fair kind; (2) by-products of general farming, such as the general run of butcher stuff, cows, heifers, bulls and unfinished steers, which are produced partly on a dual-purpose basis—milk and beef—and partly to utilize pasture land and rough foods of various kinds; (3) fed-cattle, which are largely bought for this special purpose, fed and shipped in carload quantities, the whole operation being a separate activity whose chief purpose is the production of a better grade of beef.

The number of the first kind to go to market is largely determined by conditions within the dairy industry and very little by conditions prevailing in the meat industry. They are strictly by-products of dairying, and prices realized from them have very little to do with determining their production. Whatever they realize can be considered as a contribution to increasing the profits or reducing the losses of the dairy business.

The number of the second class is determined largely by conditions prevailing in the general or mixed farming business. They are produced under a system of joint costs with the other products of this activity. Conditions influencing their production are those that determine the profitableness, or the opposite, of cattle-raising in general, and such special conditions as the prevalence of tenancy, seasonable conditions of good or poor pasture, of good or poor grass stands or failures, comparative returns from grain and grass lands. They are mostly of a beef type, but of quite varying qualities; the increase or decrease in their numbers is generally gradual over considerable periods of time.

The numbers of the third class can be arbitrarily increased or decreased over short periods of time by the volition of the comparatively small number of feeders who produce the great bulk of them. The total production is influenced by a variety of causes, such as the prices of feeds and feeding cattle, financial conditions, results of recent feeding operations, custom, habit, general attitude toward agriculture, existence of equipment and supplies of feed, etc. It is a separate activity and in accounting practice should be so considered rather than as a joint activity with the rest of the farm business.

There is one other class of cattle produced in the state which cannot be included with any of the above three. These are grass-raised cattle, that are fed very little if any grain, a considerable part of which are sold locally, but a good many of which go to market in carlots, some being fit for a cheap grade of beef, but most going for reshipment as stocker-and-feeder cattle. These cattle are largely produced in certain sections where the land is better suited for pasture purposes than for grain production, and on the rougher lands in all sections of the state. Sometimes it is a breeding-cattle proposition, but more largely it is a growing one, the raw material being light stocker-cattle, mostly steers. The production of this class tends to be fairly continuous and is influenced rather by competition of other kinds of stock, largely sheep, than by conditions prevailing in the general farming business.

Besides the difference in the controlling factors in production among these various classes of cattle, there are differences in the manner of their marketing and the causes influencing it. The first two kinds are usually marketed in small lots, considerably less than car lots, and are sold either to local butchers or shippers or are shipped through co-operative shipping associations. The season of their marketing is determined by conditions outside of market demand, but largely inherent in the character of the industry of which their production is a part. Dairy cattle freshen largely in the spring, and hence the movement of veal calves comes then. Herds are apt to be culled out in the fall and the movement of these cattle is apt to be heaviest then.

The sale of butcher stock is determined largely by the finance and economy of each individual farmer, and by some more extended factors such as prevalence of drouth, scarcity or plentifulness of rough feeds, etc., and the activity is hardly ever carried on under a fairly set program of marketing. With either class there is little chance to control the total yearly or seasonable movement, and only a very little to perfect a better distribution. As these are for the most part the cheapest kinds of cattle that go to market, and as all marketing charges are based on weight or unit rates, increases in these charges weigh exceptionally hard upon these kinds. About the most that can be hoped for in the line of improved marketing, is in the direction of the reduction of marketing costs and in the improvement in the methods by which such stock goes from the producer to the user. All sayings of this kind that can be effected are additional gains and are a larger per cent of the value than with any other kind of stock. Such improvements in marketing practice have been, and will probably continue to be, in the extension of co-operative shipping associations and in improving their methods and in seeking decreased costs at the markets by reducing or eliminating excessive or unnecessary charges.

The third class, fed-cattle, are marketed in carlots and are mostly shipped direct by the feeders, themselves. They are usually prepared under a more or less fixed plan with a rather definitely determined market date in mind. This date is fixed by the individual feeder at present, largely upon his judgment as to future market conditions, influenced by past experience, and to some extent by his supplies of feeding stuffs. The attempt is made to best conform the activity to the probable market demand, and this market demand is a controlling factor both in influencing production and in determining marketing within the comparatively short period when there is time for decision. That is, changing price is what decides the daily and weekly market movement, and price prospects decide present and future production. With this class, market economy is not the great problem, although any improvements along this line would not be unwelcome, but rather it is the organization of the feeding industry to secure a more uniform production, and one better calculated to meet consumptive demands, and a better temporary distribution of the supplies when produced. As both the production and market movement can be more or less arbitrarily controlled to these ends, what is needed is dependable information as to seasonable demands for different grades of fed-cattle, accurate information as to feeding activities within the corn-belt region where most of these cattle are produced, and then a co-operative organization of enough of the regular feeders—enough to control 65 or 75 per cent of the production—to influence the production and control the distribution.

The hog marketing problem in Iowa is a more simple one than that of cattle marketing, to the extent, at least, that hog production throughout the state is on a fairly uniform basis—that of finding a profitable home market for Iowa's leading cereal, corn—and the kinds produced are of much the same type, the lard hog. There are some sections, though, where the production is to utilize dairy by-products, and is somewhat influenced by conditions in this industry, but even here the type of hog is much the same and the market problem the same, although in strict accounting it would probably be treated in a different manner. The great bulk of the hogs are raised on the farms where fed and are finished on farm-raised grains with little additional expenditure for other feeds. The amount of the production is influenced in part by seasonable conditions, as the kind of weather prevailing during the farrowing months, but largely by prices and the so-called profits of the preceding year, and by the amount of the grain production. Because of the prolificacy and quick growth of these animals, the supply can be rapidly increased and the total numbers from year to year can show large changes. So far as the average Iowa farmer is concerned, he is more interested in the price of hogs than that of corn, and it is possible that he would be considered more as a hog raiser than a corn raiser, and that his cost-accounting should be on the basis of hog-production rather than of grain production, the corn that he sells being considered as produced under joint costs with his hogs.

Physical conditions that control crop production and breeding practice largely control the marketing of hogs. The bulk of them are spring-farrowed, and ready for market during the late fall and winter following. Happily, this results in the movement to market coinciding with the season of the year when the consumptive demand is the greatest and thus avoiding a necessity of carrying the production from the marketing to the consuming season.

The elements determining the production are so variable and so uncontrollable that there is little hope of ever bringing it under even reasonable control—any more than there is of any possibility of controlling the amount of corn production. And the relation between hogs and corn is so close and the price of the latter is so controlled by the supplies of the former, and vice versa, that no one would ever be justified in trying to fix a limitation to either. We always have had, and always will have, probably, the balance of prices dipping first to the corn side, and then to the hog side, with no one able to say which of these is the more profitable, or whether the total result would be much different if the tip of the balance were different. This being so, the marketing problem here is to try to bring about a fairly uniform market movement of the available supplies and thus to avoid great fluctuations in receipts and consequently in prices. This involves a fairly accurate determination of the available supplies for given periods and then the regulation of the market movement to a daily and weekly volume to best distribute these supplies uniformly and in accordance with market demands.

With the total supply fairly well known, there is little occasion for the price fluctuations that now prevail and that have little relation to the consumptive demand for the products. The bulk of the hogs go into cured products and it is the prices of these products rather than that of fresh pork that determines the value of hogs, or of the greater part of them. But the prices of these cured products are not subject to the variations in demand and the price fluctuations of fresh meats, for they go into consumption in a fairly uniform manner and do not need to be forced onto the market according to the volume of the weekly arrivals of hogs. According to the supporters of future trading, hog prices being controlled by product prices and which products are traded in for future delivery should be the least variable of all livestock prices, but this is not the evidence of the livestock markets either in the past or at present. There is no reason why hog prices should not be uniform over considerable periods of time, a week at the minimum, and the variations in price due to the total weekly rather than to the changing daily receipts. There is no justification for hog prices going up and down as much as a dollar a hundred within a week with no casual variations in the prices of their products.

There is considerable evidence to indicate that these fluctuations are not due to legitimate market demand variations, but are due largely to conditions existing in the hog markets, and especially at the Chicago market, which is the principal price-determining market. This situation is involved in the existence there of a large number of hog speculators whose function is not at all, or but very little, the performance of some market needed activity such as the better preparation of the receipts to meet some special demands or to better present them to actual users, but who occupy a position very much of market forestallers. It is known that the actual users, packers, local butchers, and shippers, have need of a daily supply of hogs to fill their orders and to keep their killing plants going, and that they are more or less under pressure to secure this supply. With a short run these speculators go into the market early and buy up a large number of hogs with no other intention than of selling them again on the same market to the actual users at an advance—that is, they forestall the market and by so doing may advance in temporarily. But, unless this advance has some justification in the increasing demand and higher prices for products, it is entirely artificial and is bound to disappear as soon as the receipts increase. Then when the advantage is with the buyers for use, they push it to the point of recompensing themselves for the added price they were forced to pay, so we have the result of the market being both advanced artificially and reduced unwarrantably with price fluctuations unjustifiable by the only real controlling element, which is the prices of resultant products.

These fluctuations bring somewhat higher prices to the limited number of shippers who happen by chance to be on the favorable market, but they do not bring higher average prices or a higher total price. It cannot be shown that they force the packers to pay more for the hogs they buy, but only that they force them to pay more for some kinds which is offset by a less price for other kinds. Nor can it be shown that the profits from their operations are extracted from the packers for the evidence both practical and theoretical is opposed to this; and if it is not taken from the buyers it must be finally taken from the producers, and there is no doubt in the speaker's mind that here is where it is taken. How large a tax this is, there is no way of determining, but from the numbers engaged in it, on the whole it must be rather profitable. Not only in itself, but in the resultant relations it develops with the selling organizations, it is obnoxious and ought to be abolished.

It is apparent, then, that the marketing of hogs offers more opportunities for changes from the present methods than does that of cattle. The latter will probably always have to be handled to a large extent on a consignment basis, and sale will have to be on inspection. But the necessity of this in the case of hogs is not so apparent, and there are very good reasons why they can be sold largely by description, as they are at the present time to some extent. Of all marketing methods, that of consigning to be sold at what temporary conditions determine as the price, is the most unsatisfactory, and wherever feasible attempt should be made to get away from it. So improvements in hog marketing should be in the direction of getting away from the consignment method. At least shippers should be given the alternative of selling at a known price or of taking the chances of the open market as they may choose in the same way as grain shippers can. Also the increase in freight rates has become a permanent large addition to marketing costs, and all possible methods should be sought to reduce these charges. Wherever eastern shipping hogs can be sent thru on a single rate, the difference is a gain for the producer so that the further use and development of concentrating points may be advisable. Some method of buying on bids, either on track or to-arrive, should be generally established and made a regular practice in the trade. Another promising factor in the hog situation is the growth of the country packing plants and the direct market they offer for local hog supplies. Their encouragement (but not to the extent of buying stock in promotions of them) is desirable, as is also the establishment of better relations between them and the actual producers.

From the foregoing, it is plain that the problem of finding the best methods of marketing Iowa livestock is no simple one and is not one that can be solved by any patent medicine formulaes for marketing nor by any one great panacea. Each kind and class of livestock will have to be studied by itself both on its production and consumption side and then in its relations to other kinds, and as far as possible the marketing be organized on a commodity basis. The growth of coöperative shipping is a move in advance, aiming to give the producers the control of the local marketing machinery, but it has brought with it changes both in the country and at the market that need be taken into account.

It has brought about a considerable change in the relationship between the country and the central marketing machinery. Formerly, when the stock now marketed thru the coöperatives was handled by local shippers, there was a close personal relationship between the local buyer and the commission man. The business relationship usually grew out of a former friendship or commenced because of reputation for salesmanship or demonstrated ability as such. The local shipper was a market expert whose success depended upon his knowledge of market quotations, shipping costs and best markets. He came often to market and saw his stock sold, judged of the ability of the salesman by comparing his results with those of others, knew market methods and had a financial interest in getting highest prices and the maximum of service.

With the shipping associations, this personal relation has largely disappeared. The managers, who are too frequently changed, have no financial interest in the outcome of the shipments and the actual owners are mere names on the invoices. Many of the managers are not competent judges of livestock and do not undertake to keep themselves informed as to market values and changes and hence are not fitted to judge as to whether prices received are in line with the market or not. The same can be said of the numerous small producers whose stock goes to make up the shipments; and as they do not come in contact with a buyer as they did in dealing with the former local shippers, there is less incentive for them to keep posted on market values and they do not know whether a given price received is a fair one or not.

Hence at the market many of the old incentives to effort and service have disappeared, together with the feeling of responsibility to an interested shipper who is personally known and who, it is felt, knows the market and who will react quickly to any failures or shortcomings. And this changed attitude is too often reflected in the interest taken and the service rendered. And to too great extent patronage is now dependent upon personal accommodations and favors to the local managers rather than to actual results obtained in the selling of the stock.

And the changed methods in the country have brought about changed methods at the market. Because each shipper wants his stock sold on its merits, and because of the diversity of owners and the lessened uniformity of the shipments, the tendency has grown to change what was essentially a wholesale market into a retail or jobbing one. In order that more frequent shipments can be made, there are more cars of mixed stock, and little attempt is made to assemble carloads of similar kinds or grades. With cattle, this necessitates sale in smaller lots, more sorting, more draughts at the scales, more tickets, and more accounting; the same results are found in the hog house to less extent, but with considerable added office work in adjusting selling price between owners of different grades. All this extra yard work tends to congest the alleys and the scales and to reduce the efficiency of the yards equipment.

From these changes in relationship and in method, have come some defects in operation and practice. On the whole, it is probable that coöperative shipments are not so well handled, or as advantageously sold, as are carloads of similar stock having one owner. The reasons for this have been touched upon partly before. Besides the lack of personal responsibility to an individual shipper who is also an acquaintance and a judge of sales, the extra work involved in identifying, sorting and weighing according to ownership, makes the salesman anxious to get the stock sold so that the work can be completed. Also the necessity of selling in small lots results in less competition and more resort to sale to yard traders; and the desire to get price on each owner's animals prevents or diminishes the possibility of price adjustment by which some animals help to sell others, which is possible if they are all the property of one owner. And to some extent the fact that the shipment is a "Co-op" and that "Co-ops" have made their work more difficult, has resulted in an attitude of less zeal in handling them by yard employees.

And altho one of the desired results of coöperative shipment is that each owner's stock may realize its actual market value, in practice it comes short of this. Where a number of animals of different grades are sold at a straight price and they have several owners, there is bound to be a difference of value that cannot be adjusted in adjusting the price. Where car-lots of hogs or calves are sold at a straight price and the adjustment of the total among the different classes is done in the office, this is apt to be rather a hit-or-miss adjustment, than based on a close classification. And it must be admitted that the negligence or ignorance of the local manager contributes not a little to this in the failure to properly mark and identify the separate animals.

Finally, in spite of the additional equipment in scales and pens made by the yards company, and the increasing skill of employees in handling and identifying these shipments, it still remains that the present method of handling them tends to congest the market in seasons of large receipts, to increase considerably the time necessary for all stock to be weighed up and thus to increase the shrink, and involves a larger total cost for labor in the operation of the market which the producers must pay.

How this situation is to be met, it is not easy to say. But the best judgment seems to be that it will require a changing of methods both in the country and at the yards. The changes in the country will probably have to be along the line of local confederation of individual associations with better supervision and more efficient management. The changes in the yards will necessitate a radical change from the present methods of handling, sorting and selling, and it is probable that such necessary changes cannot be brought about except by the establishment of selling agencies that will have the authority and inclination to adopt new methods.

But divergent as are the problems for each class of livestock, there is only one promising—yes, possible—method by means of which they can be solved. This is thru the coöperative organization of the different classes of producers, to the extent that they have a separate and distinct commodity along the lines of that commodity. It is fairly certain that the present agrarian movement in this country will succeed or fail according to whether it succeeds or fails in putting agriculture—especially on its marketing side—on a coöperative basis. Organization may be extended until it includes practically all the farmers of the great agricultural states, officers and committees may be chosen who may claim to speak for millions of American farmers, they may bring pressure on congressional committees and force concessions for public, quasi-public, and private industrial and financial powers, but if this is all that is accomplished, or that it is hoped to accomplish, the movement will not be a success. For such actions as those are largely political and seek changes by political means. But the disabilities from which American agriculture is suffering are not political but industrial, and relief for them must be sought not in political action but in industrial organization.

I am well aware of the close relation that exists between politics and government action—the legal state—and industry and finance—the economic state in modern society, and of how action in bringing about changes in the latter is dependent upon legislation in the former. But I insist that legislative action and legal relief or assistance are much the smaller and unimportant elements in the situation. For so long as the modern state refrains from rather complete socialization of industry, so long as production, distribution and consumption are left to be controlled by private initiative and individual effort, just so long will cures for industrial ills have to be sought in industrial action. And industrial action that limits itself to seeking information, and expressing opinion, and giving advice, and does not concern itself with seeking concrete remedies for concrete situations in unified and controlled action, will never get very far.

Farmers must be organized by commodities and organized so effectively that they can bring the necessary unified and controlled pressure to bear on concrete situations as they present themselves. This kind of organization is what is involved in true coöperation. But how many farmers are informed as to what true coöperation means, what it requires in individual sacrifice and surrender, what it offers in collective benefits and advantages. The primal need of the agrarian movement today is the teaching and the preaching of this doctrine of true coöperation. Its fundamentals should become commonplaces with the whole farming population. All farmers must be taught that the best interests of each are to be secured in seeking the best interests of all, that in handling of each commodity all should be for each and each for all; that to make this possible involves the fusing of the individual interest in the general interest; that the sacrifice of the right to do what he would, as he would, when he would, and the surrender of the absolute control over the disposition of what he individually owns are a part of the price that the individual must pay to secure this general good; but that in the long run in making possible the general good he is really contributing to his own individual self-interest. This new doctrine that the equitable treatment of all is more desirable than the special treatment of a few is a new ethics to most farm consciences and as such it must not only be taught, but also preached. And until this doctrine is generally understood, and accepted and acted upon, the accomplishments of the agrarian organization movement are going to fall far short of what they can and ought to be (Applause.)

PART VI

State Food and Dairy Commissioner's Report for Year 1920

W. B. BARNEY, Commissioner.

Economic readjustment has been the chief problem of the past year. Disturbed and abnormal conditions, the heritage of every great war, mean a trying period of reconstruction for every nation involved—a period of economic warfare between conflicting interests during which many suffer and few are benefited. Following every great crisis comes a period of high prices and great business activity during which extravagance is the rule of the hour and a false feeling of prosperity, induced by the circulation of tremendous amounts of deflated money, gives the wage earner in particular, a feeling of financial security which history does not show to be justified. This in turn is followed by a true period of readjustment, when, because of the inability of the great mass of consumers to pay the prices established by inflation, prices again seek their normal level. This has been the history of the past two years. The last year covered by a report of this department, i. e., the year ending November 1, 1919, was a period of extravagance and high prices; the past year, especially the last few months, have seen the beginning of the decline. Prices are still high, of course, but indications tend to show that in most cases a steady reduction will take place. This period of price readjustment will be a most difficult one, for neither the manufacturer, the producer of raw materials, nor the laborer can be expected to be content to return to old low levels. However trying it may be, there appears to be no reason why the country should not pass through this period without serious difficulty.

The same conditions which made 1919 particularly difficult for this department have continued this year. Not only have high prices of commodities resulted in a large number of complaints of illegalities being made which required the attention of the inspection force but the beginning of the break in prices made it even more difficult because of the feeling, particularly on the part of housewives, that individual merchants were not reducing prices as rapidly as they believed justifiable. These complaints had to be traced and reported upon even when they fell without our jurisdiction for, coupled with them, in most cases, were charges that violations of other laws enforced by this department were being made. This placed a considerable burden upon department inspectors, for it was necessary to attend to these complaints in addition to caring for the already heavy routine work.

Despite the rapidly increasing work of the department, enforcing the fourteen laws assigned to it, there has been no increase in its personnel. While it will soon be imperative to increase the size of the force, at the present time I am more concerned with keeping the men who are already a part of it. Despite the salary increases granted by the Thirty-eighth General Assembly, resignations have been very numerous owing to the willingness of commercial firms to pay considerably larger salaries than are being paid by the state. About one half of the men who were members of the force at the time of the last General Assembly have since resigned. The problem of keeping clerical and stenographic help is also a very acute one. Trained workers of this kind are naturally unwilling to remain in the employ of the department at the salaries offered when commercial firms in Des Moines gladly pay from $25.00 to $50.00 per month more. Not one of the stenographers whose names appeared in the last anual report are employed at the present time. Obviously something must be done, if the department is to retain its trained men and women. I might add here that it is only the feeling that the next General Asembly will recognize the necessity of revising salaries which is enabling the department to retain a number of the members of its personnel.

In general, the laws enforced by this department are satisfactory as they now stand and no radical changes will be sought this year. The classification of the wording of several laws, designed to facilitate their interpretation, will be requested, but in even these instances, the general purpose will not be changed. In this connection, the law requiring the pasteurization of skimmed milk before being returned to the farmers from the creameries will be asked to be applied to butter milk as well. Most of the desired changes are taken up in the code commission bill, however.

An appropriation for the erection of a dairy building at the State Fair will be asked from the Legislature this winter. That Iowa's great dairy industry should have only two small booths and a refrigerator display to represent it, at the greatest of all state fairs, is a matter of great surprise to visitors from other states. This apparent indifference to the dairy industry has been a source of considerable dissatisfaction to the various dairy organizations throughout the state. Complaints from Exhibitors of dairy machinery and supplies are growing more numerous each year, until they have now reached the stage where threats to discontinue exhibiting are being heard. It is my opinion that this building should be second to none in the country. Besides ample space for the exhibiting of dairy machinery and supplies, it should be large enough to permit of the serving of dairy products and contain a working model of all phases of dairy manufacturing. By this, I mean that a creamery, market milk plant, ice cream factory, and cheese factory should be in actual operation each day of the fair. The opportunity to carry on educational work among the men in Iowa's dairy plants by model factories of this kind is very great. Not only would a building of this kind possess great educational value but it would be the source of considerable revenue to the fair board.

One misapprehension which exists widely in this state is that the fines levied against violators of the laws enforced by the department revert to it for its own use. This, of course, is far from the truth, as neither the funds collected in the form of fines nor the fees received for licenses are retained for our use. The fines are not handled by the department at all but are paid directly into the state school fund by the courts which assess them, while the license fees are turned over to the state treasurer. The salaries and expense monies of the department are approved by the legislature and can not be changed no matter how actively other funds are collected.

Another misunderstanding which should be corrected is the impression held by a few that there is unnecessary duplication of work done by the department inspectors. Criticism is sometimes made that the same territory is covered by two or three inspectors when one would suffice. Statements of this kind are made without a true knowledge of the facts. While it is true that as many as two inspectors made the same territory, their work is entirely different. The inspectors of this department are specialists and each man is by training fitted to do a certain kind of work. I believe that men of this type will get far better results than men who are veritable "jacks of all trades." Since, as is brought out in another part of this report, the functions of this department are educational, as well as law enforcing, it will readily be seen that a man to be of any assistance to Iowa's industries must be fully informed in his own field. In other words, I believe that a trained dairy specialist, for example, can be of greater assistance to a creamery than an inspector whose knowledge is so general in its nature that lack of time prevents him from knowing any one subject well. This executive plan merely follows that in best commercial practice. Iowa cities frequently see as many as four or five salesmen from one company calling upon the same trade. Surely this must be done with a purpose, for no one is foolish enough to believe that any commercial house can afford to practice such methods merely for the purpose of creating positions for their friends. It is obvious, of course, that these men are specialists in a particular line and that these companies have found it more economical to operate under a system of this kind than to send out one salesman with superfluous knowledge of all departments and a specific understanding of none. It will readily be seen that this same logic applies to a state department of this kind.

Attention might well be called, at this time, to the work of the various state organizations. The past year has seen a rapid growth in both membership and influence of these bodies and a recognition of their possibilities become general. Among them might be mentioned the State Dairy Council and the Iowa Retail Merchants' Association. These two organizations, in particular, have enjoyed a very rapid growth and are doing much to better conditions in their respective fields. There is room for a great amount of educational work on the part of both of these organizations and I believe that their influence for good will be tremendous.

A third movement, which while affecting this department less directly, is nevertheless one in which we take the keenest interest. It is the formation of the Farm Bureau Federation. Problems and possibilities confronting this great Federation are almost numberless, but with the loyal support, which its members are giving their officers and the able manner in which these officers are conducting the affairs of the Federation, there is every reason to believe that these problems will, eventually, be solved.

Not the least of these problems, in my estimation, is that of bringing its members to the realization that the inefficient farmer is no more entitled to consideration than the inefficient business man. There is no more justice in a farmer expecting assistance when he fails to conduct his farm efficiently than there would be in a poor business man's request for state aid. In other words, a farmer who demands that the Farm Bureau Federation obtain for him a price above cost of production when inefficiency brings these costs to an unnecessarily high degree, is asking something to which he is not entitled. Failure on his part to recognize this fact is placing a premium upon slovenly farm management. Farming, after all, is a big business, and those engaged in it should be given the same protection which is accorded to the recognized businesses. More than this he can not reasonably expect.

No state agency can come into as constant close contact with the consumer as does the Dairy and Food Department without having its attention drawn forcibly to the need of a State Marketing Bureau. While it is not my intention to discuss the subject at any length here, I feel that such a Bureau would prove of inestimable value to the state and that the attention of the Legislature might well be called to this subject again in the same manner as was one in the last two Gubernatorial Messages. Rightly organized and conducted, with sufficient funds available to carry on this work, a Market Bureau would prove of value, not alone to the consumer but to the producer and distributor as well. I can think of no recommendation of greater importance than this.

Tuberculosis eradication under the supervision of State and Federal officials has been going forward satisfactorily but from the standpoint of our department it appears that considerably larger funds should be appropriated in order that this work might not have to be carried on over such a long period of years. This work is not, of course, carried on by this department, but we feel that we have a direct connection with it, inasmuch as farm animals furnish products which come directly under the supervision of this Department. According to information which we have every reason to believe reliable, about nine per cent of the cattle examined have re-acted to the tuberculin test. Obviously, then this department is greatly interested in the eradication of tubercular cattle. Until such time as tuberculosis has been eliminated from our herd and laws compelling the pasteurization of dairy products are passed, no amount of careful inspection can give absolute assurance of safety. This subject is treated at greater length in another part of this report.

In common with other state departments, printing difficulties have been a source of considerable annoyance to us during the past year. The last report of the department was delayed to such an extent that it was almost useless as far as general distribution was concerned, and the same is true in other instances. Inasmuch as the information contained in these reports and bulletins are of considerable interest to the various interests for whom they are designed, it is to be hoped that the Legislature will take steps to remedy the situation.

ECONOMIC SITUATION.

In the discussion of an investigation of living costs which appeared in the last (1919) report of the department, these statements were made: "More than any other factor in lowering prices, however, will be the action of the consumer himself * * * just as long as they continue to refuse to consider the prices asked for goods will high prices continue * * *. The larger responsibility rests upon the buying public; if people would refuse to buy, prices would soon drop."

Recent developments have proved the truth of these assertions. Today the general trend of prices is toward normal. Flour is about the same or a little lower now than it was a year ago this time. Vegetables and fruits are lower; meat products are cheaper; coffee less than one half the price of a year ago; sugar has declined from 10 to 12 cents a pound during the last few months; cotton, leather, hides, wool and silk have encountered heavy declines in prices. Cancellations of orders have acted with declines in raw materials to paralyze the markets for textile goods.

Restricted buying by the consuming public is the big reason for these declines. Increased production and other factors enter in, of course, but the unwillingness of the public to pay high prices is the chief factor in starting the downward movement. This refusal to buy articles of ordinary usage is reflected not alone in prices of these particular products, but in practically all others.

The general inclination of buyers to hold off for higher prices has caused a slump in the shoe industry. The same tendency is noticeable in the clothing industry, and it would seem that lower prices are almost certain to prevail next spring despite the statement of some manufacturers that orders for special delivery will not be made at any great reduction. Incidentally it would appear that such statements as these would be conclusive to great discontent on the part of the consuming public. Rightly or wrongly, there is a feeling among certain consumers that these manufacturers are merely attempting to hold prices up by artificial means and that the maintaining of these prices in the face of depressed markets in raw materials is not justified. Despite the assurances of manufacturers that the cost of raw materials is a small factor in his costs and that labor, the chief item, is higher than a year ago, the farmer, for example, can not understand why he should be forced to pay war-time prices for shoes when hides bring him a greatly reduced price; why he should pay sky-high prices for clothing when his wool is a drug on the market; why he should pay high prices for meat in the face of less than one dollar a bushel for corn; why retail cotton goods are high when the cotton market has gone to pieces. Perhaps manufacturers of these staples believe that conditions justify the maintainence of these prices, but it will take considerable argument on their part to convince the consuming public that this is true, particularly in view of the fact that the cost of raw materials has been given as the cause of high priced staples so frequently in the past.

Whatever may be the justification for maintaining high price levels on manufactured goods, one thing is certain; the public mind is just as intent upon practicing economy at the present time as it was upon the reckless purchasing of articles, regardless of price, one year ago. There are several reasons for this: the money market is "tight," industrial employes are being discharged in rather large numbers, and there is a well defined uncertainty as to what the winter will bring forth. Then too, the public conscience has awakened stern protest against the mania of spending which ran rampant at the close of the war. This tendency of consumers to hold off buying has naturally caused an accumulation of certain stocks and a considerable degree of liquidation has taken place in merchandise in the last four months. From present indications these liquidations will continue for some time.

Secretary of Commerce Alexander, apparently has well summarized the effects of these price slumps when he stated; "No fears need be entertained that these lower prices will be followed by a falling off in business, lessened production or any other dullness which characterized spring trade in many lines. On the contrary they will give such an impetus to retail buying as to off-set any danger of over-production. In short, I believe that the let-up in buying has been due entirely to high prices; a great demand still exists which will manifest itself when goods reach a lower price level."

"A discriminating public will not buy unless there is a very material reduction in prices. There is no lack of demand, but the trouble lies in the refusal or inability of the people longer to pay high prices. I believe that the out-put of our mills can readily be consumed at lower prices and am very gratified to note that a re-adjustment of prices has begun."

Whatever may be the hopes of labor, it appears almost certain that wages will fall in sympathy with the general downward trend of prices. Certain it is at least that competition for available jobs will cause production per man-hour to increase. While increased production on the part of labor is to be regarded as a healthy sign, it is to be hoped that the reaction towards lower wages will not be carried to undue lengths. That a reduction in wages, particularly of the unskilled class, should take place is generally regarded as being necessary by manufacturers, farmers, professional men and that great class of workers who do not fall into any of these categories. However, as stated, it is to be hoped that the reduction will not be great enough to lower labor standards of living to an unjust degree. As in every other commodity, however, the inexorable law of supply and demand will undoubtedly be the deciding factor in determining wage levels.

It was especially fortunate that a fairly plentiful supply of labor was available at harvest time this year. With bumper crops prevailing in most of the food producing sections, it would have been almost impossible to garner them under such conditions as have been previously prevailing for several years.

While still not entirely satisfactory, the railroad situation has shown a decided improvement in this state, and farmers are experiencing less difficulty in securing cars with which to market their products.

The coal shortage is still acute in certain parts of the state, and with hints of lessened production during the coming months, the probabilities of obtaining this product in adequate amounts is one which is a source of considerable worry on the part of our manufacturers.

Taking up the economic situation as it deals more directly with dealers in commodities operating under laws under the jurisdiction of this department, a number of interesting situations have arisen. For one thing, there is the paradoxical situation of grain prices, particularly corn, being forced to pre-war levels because of a large visible supply, while in certain other countries there is an acute shortage. Difficulties of transportation are not alone to blame for this condition. The chief cause, of course, is due to factors arising directly from the war, namely, declines in values of foreign money and foreign credit. European money has declined to such an extent that even with low prices prevailing in America it is almost impossible for Europeans to purchase our products for any reasonable sum after they have exchanged their depreciated money for ours. At best, few of the foreign nations have supplies of money available and with the sharp curtailment of credit on the part of both our government and our bankers, it is practically impossible for European nations to buy on long time payments. As stated, the result on prices of American farm products has been alarming from the point of view of the farmer. Nor does it appear possible that artificial standards or prices will suffice to guarantee the farmer what may be regarded as a fair return for his products. The return not only in this country but of other nations to pre-war conditions appears to be the only solution of the problem. To attempt to set an arbitrary price for any product in disregard of the law of supply and demand will eventually prove a failure.

While in the case of a number of products sharp declines have taken place since that date, a comparison of prices as of September 20th, 1920. and the same date last year will prove interesting. A comparison of a number of products in which Iowa is more intimately interested is given here:

	Sept. 20, 1920	Last Year.
Flour, Minnesota Patent	$13.25	† $12.25
Wheat No. 2, Red †	2.68	* 2.36½
Wheat No. 2, Durham †	2.68	* 2.36½
Corn No. 2 Yellow	1.46½	1.65¾
Oats No. 2 White	.73	.77¾
Pork, Mess	31.50	49.50
Lard, Prime Western	21.70	24.80
Coffee, Rio	.08-.8½	.15½
Sugar, Granulated	14.50-15.00	* 9.00
Tea	.15	.22
Butter, Creamery	.60½-.61	.59½-.60
Cheese	.29-.29½	.30½-.31
Petroleum, refined	.29	.17½
Hides, Natural straight	.30	.43

† c. i. f.

* Government figures.

Bradstreet's price index numbers are also interesting, being as follows on the dates mentioned:

September 1, 1920	17,9746
August 1, 1920	18,8273
July 1, 1920	19,3528
June 1, 1920	19,8752
September 1, 1919	19,4720

The London Economist commodity price index for about the same period reads as follows:

August 31, 1920	7743
July 31, 1920	7876
June 30, 1920	7847
August 31, 1919	6503

As will be seen, declines have been constant, for as was stated, the reluctance of the buying public to purchase at present prices indicates that they will continue.

The following survey by Franklin K. Lane, former Secretary of the Interior, issued by the Federal and Deposit Company, of Baltimore, will also prove of interest. As they refer to this part of the country some of the questions and answers are as follows:

"No. 1. Are building operations in your territory increasing or decreasing at this time?

Answer. Decreasing.

No. 3. What is the extent of the increase in the cost of labor over 1919?

Answer. 10 to 50 per cent.

No. 4. Is labor increasing in productivity per man?

Answer. No.

No. 5. Is there a shortage of labor?

Answer. No.

No. 7. How do wholesalers and retailers regard the prospects for fall and winter?

Answer. Good.

No. 10. Is there a shortage of coal?

Answer. Yes.

No. 11. Is the shortage of freight cars being substantially reduced?

Answer. Yes.

No. 12. Are general transportation conditions improving?

Answer. Yes.

No. 15. What is the sentiment regarding Government ownership of railroads?

Answer. Opposed.

No. 17. What are the general conditions of farmers in your territory?

Answer. Good.

No. 18. Are they well supplied with funds as the result of the sale of this season's crops?

Answer. Crops unsold.

No. 19. What is the sentiment regarding farmers' co-operative movements?

Answer. Favorable.

No. 20. What is the general effect of the recent drop in grain prices?

Answer. No effect.

No. 21. Do the banks appear to have funds to lend and at what rates of interest?

Answer. Yes—6 to 8 percent.

No. 22. Are the banks well loaned up?

Answer. Yes.

No. 25. Have the number of individual savings accounts increased or decreased?

Answer. Increased.

No. 26. If the sentiment is against the excess profits tax, what substitute is preferred.

Answer. Various substitutes.

No. 27. What is the sentiment regarding the sales tax?

Answer. Divided."

SUPPRESSION OF TUBERCULOSIS IN OUR DAIRY HERDS.

As the attitude of the commissioner and this department toward the enactment and enforcement of laws having for their object the eradication of Tuberculosis among our farm animals has been attacked without warrant or reason, I desire to have my position understood.

I have used the Tuberculin test for more than thirty years in my own herd for the purpose of eliminating those animals that were shown by the test to be affected. I have encouraged and worked for the enactment of every law offered in the Legislature during that time, having for its purpose the control or eradication of this disease. As proof of this, I herewith submit a portion of my last year's report which was written about July 15, 1919. It reads as follows, and I feel can be easily understood:

"The Suppression of Tuberculosis

In my opinion there was no act of the 38th General Assembly of more importance to the people of our Commonwealth than the law controlling and suppressing diseases of domestic animals. In the cattle industry, Iowa admittedly, taking all things into consideration, surpasses all other states because of the number of pure bred herds within her borders. Besides this, she stands almost alone in the production of hogs.

This measure is sure to have a great influence on the production of both cattle and hogs in the future, as it will be reasonably easy to eradicate tuberculosis in our swine when our bovine kind are free of this dread disease.

Neighboring states have enacted similar laws and profited by their foresight. I have always felt that, since the public would be benefited, it was right and reasonable that they should, in a measure, share any loss that would come to the owner of the herd. This is especially true as it applies to breeding and dairy cattle, as it is reasonable to assume that the law as it was drafted contemplated caring for this class of cattle and bringing them within its scope, and it is perfectly right that it should.

I have never thought that the dairyman or breeder should be compensated in full for reactors as that would perhaps encourage carelessness and in some instances trickery and dishonest methods.

While the state and Federal indemnity is a great inducement to the cattle man to clean up, when you take the present value of cattle into consideration, it is not as large as it should be. This is especially true as it applies to the better class of registered or pure bred cattle.

After an experience of over 35 years in breeding cattle, I can draw but one conclusion; that a great share of our troubles with this disease would be eliminated by the use of clean, well lighted and well ventilated barns. I do not wish to be understood as saying that the disease can be eliminated under conditions of this kind without the use of the tuberculin test and doing away with the reactors. I do feel sure, however, that the percentage of loss on the first Federal and state test and tests thereafter will be much less under such conditions. It is surprising to me, that in this day and age, there are still many breeders who do not recognize the value of light and ventilation. The old filthy plank floor, poorly lighted, ill-ventilated barn is the harbinger of disease, especially tuberculosis. There is nothing cheaper and better than sunlight. It is my opinion that the Almighty would not have supplied it in such generous quantities, had He known that the stockman and farmer had so small an appreciation of its value.

It is my judgment that it will be a difficult matter within a few years for the owner of a herd of pure bred, registered cattle to do any considerable amount of business, unless the herd is under Federal supervision or in the accredited list. I feel sure that cow's milk has saved a thousand children, where one has been made to suffer by its use. The bare possibility of one child in a thousand becoming affected by its use, is a good and sufficient reason why our dairy herds should be cleaned up.

The breeder who ignores right methods and up-to-date practices is like the child playing with fire—you can't tell when either will be burned. We have had too many examples of this kind within the last year. I call to mind a breeder who was about to hold a sale. The date was fixed, and quite an amount had been spent for advertising. Just to put on the finishing touch, he called in a veterinarian and applied the test. About sixty percent of the lot reacted. No one wanted the balance, so the sale had to be declared off. Had a test been made a few years earlier the probabilities are a few reactors would have been found and if they had been taken out and a follow up test made, the percentage of loss at time of sale would have been so small as to be of no consequence.

The tuberculin test measure may really be considered as an insurance. It helps care for a part of the loss that is sustained by the breeder or owner who is unfortunate enough to get his herd infected. It encourages the young breeder to go into the industry. It says to him, "If you will do so, the state and Government jointly will stand between you and a total loss if your herd becomes infected." The older breeder who does not take advantage of the law has a rather narrow vision and in my way of thinking, will find the business unsatisfactory and not at all profitable.

Though we are a little late in taking hold of a good thing, let us show our neighbors in Minnesota and Wisconsin that we are none the less in earnest than they have been, and we will soon have in Iowa a long list of accredited herds."

I desire to say at this time that wonderful progress has been made within the last year or since this law became effective. I hope that the 39th General Assembly may comply with the request of the State Veterinarian and the Animal Health Commission for a substantial increase in their present annual appropriation, so that the work so well started and in hand may not be hindered on account of lack of funds. The State Veterinarian, in co-operation with the Federal authorities, has entire supervision over this work. This department has nothing to do with the enforcement of the provisions of this law. There is nothing in the law compelling the farmer or breeder to have his cattle tested. Where conclusive evidence is obtained that a certain herd is affected with tuberculosis, the State Veterinarian is empowered to order the herd guarantined. No such authority is vested in the Dairy and Food Commissioner. Ordinances excluding from distribution and sale milk other than from tuberculin tested herds may be made by a city council. (See Sec. 3595, page 1087). For further information see Sec. 1740, page 541, Compiled Code of Iowa 1919.

I hope I have made my position on this subject understood. It has been the same for the last 15 or 20 years.

THE FUNCTION OF THE INSPECTOR.

To the Iowa merchant an inspector of the Dairy and Food Department is either a friend or a foe—the honest man will find him a sincere friend; the dishonest man will find him an implacable enemy. The attitude of the inspector will reflect that of the merchant.

It has never been the policy of this department to regard itself as a police force. It has always aimed to bring about the observance of those statutes of which it has the enforcement by persuasion rather then by coercion. An effort has been made to impress upon each employee of the department that greater results could be accomplished by working in cooperation with the merchant rather than by attempting to wield a Big Stick.

It is believed that practically in no instance has an Iowa merchant been prosecuted without warning. It is not meant by this that each individual is warned that he is violating the law before being prosecuted, but it does mean that no prosecutions are made until efforts have been made to warn merchants as a class that new statutes had been passed or that certain violations of old ones are being made. If a merchant who believes that he has been unjustly prosecuted will make an investigation, it is believed that he will find that frequent warnings had been sent to the merchants from this office by means of trade and daily press, to say nothing of the large number of bulletins sent out by the department and the personal warnings given by the inspectors. While there are, of course, a number of instances where merchants have been prosecuted for unwitting violations of the law, a large number of prosecutions have resulted from conscious, flagrant violations.

Considering the large number of Iowa merchants and the huge volume of business transacted in food stuffs and other commodities, the control of which is a function of this department, prosecutions have been relatively few in number. This speaks well for the business ability and integrity of the merchants of the state. It appears safe to say that the proportion of prosecutions to the amount of business done will be even smaller in the future.

One disappointment which the Department experienced this year, was the attitude of a number of merchants toward the law requiring the candling of eggs. As is well known, the egg law empowers the commissioner to set aside a certain period of time when candling certificates shall not be required. This open season is provided for to relieve the merchant of the necessity of candling at a time when practically no poor eggs are sold and when the flush of the season is at its height. It is, then, a ruling designed to assist the merchant and it would appear only fair that he should show his appreciation of such a ruling by re-commencing candling promptly upon the date which is named as the one upon which the open season shall terminate. It is with regret that it is found necessary to state that a number of merchants did not co-operate with the department in this respect, but continued to buy and sell eggs without candling certificates, using as their excuse, when discovered, that they did not know that the open season had ended. It seems a little hard to understand just why these men should know when the open season started if they did not when it had closed. When the announcement of the open season is made, the opening and closing dates are definitely stated, and it hardly appears logical to believe that there are many merchants who would remember the former and forget the latter. Most of the prosecutions brought for violation of the egg law came as a result of failure to obey the candling requirements, although a number of cases were filed for wilful selling of unedible eggs, also.

The Dairy Law and its adjunct, the Dairy Container Law, was one of the five most frequently violated. Iowa test ice cream, low test milk, selling of substitutes improperly labeled and failure to return containers, are the chief sources of violations of this law. Prosecutions under this law, apparently, are usually either wilful or unwitting in nature, comparatively few careless violations being reported. Where large commercial ice cream companies, having modern testing equipment available, continue to manufacture ice cream from three to five percent below the legal standard, it seems justifiable to consider such practices as wilful infractions of the law. Among the unwitting violations, the sale of various milk compounds which were not branded "Imitation Evaporated Milk," as required by the statutes, is perhaps the most frequent. While it is not the desire of this Department to punish merchants who sell these milk compounds unwittingly, it has no other recourse. The attention of manufacturers and jobbers of these products has been called to the requirements of the law time and again, but despite this fact, a few, particularly jobbers, continue to ship these milk compounds into the state bearing labels which do not meet with the requirements. Since practically all of these companies are located in other states, the department has no means of punishing them other than by filing prosecutions against dealers handling their products, with the thought that the fines will either be passed on to the parties who are really guilty or that so much dissatisfaction will arise that they will either be forced to label these compounds properly or withdraw them from sale in this state. The decreasing number of illegal samples found is testimony that this method is proving successful.

Considering the large volume of Iowa business, violations of the Weight and Measure Law are comparatively infrequent, but are of especial importance because of the high price of products prevailing. In many instances where violations of this law were reported, it was found that the merchant was innocent of any intent to defraud and that he was not aware that his weights or measures were incorrect. However, it is safe to say that in many cases where prosecutions were made for violations of this law, the merchant was either guilty of dishonesty or negligence.

The high price of materials is a temptation to certain dealers, particularly manufacturers, to use substitutes in violation of the Pure Food Law. Notable among these infractions was the use of saccharine in various soft drinks. A campaign carried on during the months of June and July, 1920, resulted in the examination of a large number of these soft drinks, about 25% of which contained saccharine. In a few instances it was found that the use of the artificial sweetener was continued even after a manufacturer had been prosecuted. Needless to state that in cases of this kind, the inspector was instructed to request the judge that the second fine be placed high enough to discourage any future repetitions.

The last of the five laws most frequently violated i. e., the Sanitary Law, continues to be an important feature in the routine of the department force. Under this law a number of prosecutions were also made for the failure on the part of dealers to return ice cream containers in a clean condition.

Prosecutions under the nine other laws enforced by this department: the Agricultural Seed Law, Concentrated Feeding Stuff Law, Condimental Stock Food Law, Paint and Linseed Oil Law, Insecticide and Fungicide Law, Turpentine Law, Cold Storage Law, Commercial Fertilizer Law, and Calcium Carbide Law, were infrequent. A large number of samples were seized and analyzed but practically all of them were found to be up to the legal standard.

FOOD AND SANITARY INSPECTION.

Due to high food prices which prevailed during the past year it was found necessary to conduct even more rigid inspection than in former years. Certain dealers were unable to resist the temptation to dispose of partially decomposed food, in violation of the law while others resorted to the use of saccharine to displace high priced sugar. During the period extending from January 1, 1919, to August 1, 1920, a total of 117 prosecutions was made by this department for violations of the food law. During the same period 95 prosecutions were made for violations of the sanitary law. Of the food violators, sixteen who were brought to trial were using saccharine in the manufacture of soft drinks. The Iowa law is very strict in its regulations as to branding and adulteration. The law requires that the labels on all packages of foods must not be misleading either as to their composition or statement of the quantity contained in the package. Pictures which are misleading are not permitted, for example, a picture of a maple tree with the sap flowing into buckets, is not permitted on a can of imitation maple syrup, nor the picture of a Guernsey cow upon the label of a package of oleomargarine. If a food is made up of different ingredients the label must show a list of these ingredients printed in plain legible type. It will be seen that the law provides that the consumer must be given sufficient information on labels of food products so that he will know what he is buying. This is not an unreasonable requirement, for surely those who pay their money for foods are entitled to all possible information regarding their purity and composition as well as the quantity.

For several years after the enactment of food laws, manufacturers were with difficulty forced to truthfully label their products, and many evasions were attempted. In many cases the statement of quantity was made in very small type or placed on the back or side of the package where it was not seen unless a search was made for it. The law requires that this statement must be made upon the main label and in plain legible type. A search among package foods on the grocers shelves will show a general compliance with the law.

ADULTERATION.

In former years much of the cocoa sold was mixed with cocoa shells as they were a by-product in the manufacture of cocoa. These shells today are packed and sold as ground cocoa shells for making a low grade cocoa; as the law requires that cocoa mixed with shells must be labelled to show the presence of these shells and the manufacturer, realizing that this would effect the sale of his product, has ceased this practice entirely.

The mixing of chicory and roasted cereals with coffee, a common practice in past years, is now sold as a compound of coffee, chicory and cereal often under the name of "Cereal Coffee."

Confectionery, at one time grossly adulterated with parafine and inert materials and colored with dyes often injurious is now made under sanitary conditions and of pure wholesome materials and colored with dyes that are passed by the Federal and State authorities as perfectly harmless. Some states forbid the sale of foods colored with these dyes but as long as the health is protected we believe the child should have his striped stick of candy, his pink ice cream and red strawberry pop.

A large amount of sophistication existed in flavoring extracts. Lemon extracts were made with dilute alcohol, a trace of lemon oil or citral and highly colored to make the housewife believe it contained a large amount of flavoring. Vanilla extracts were made of synthetic vanillin, courmarin and prune juice and sold as double and triple strength vanilla with a picture of a cluster of vanilla beans on the label. Banana, pineapple, etc., extracts, were sold for double strength products. The law has rectified these conditions by defining an extract as requiring at least 5% of lemon oil in lemon extract, a definite amount of vanilla beans in vanilla and in the case of banana, pineapple, etc., they must be sold as imitations as there is no true extract made from these fruits, they being made by mixing certain alcohols and ethers.

The mixing of cotton seed oil with olive oil is still practiced to some extent, the temptation being strong to get olive oil prices for the much cheaper cotton seed oil. Some dealers have even sold pure cotton seed oil for olive oil, with the picture of a cluster of ripe olives upon the label with French or Italian inscriptions.

It was a common practice also to ship American cotton seed oil to Europe where it was mixed with olive oil and returned to the United States under a fancy brand of olive oil. There are now at the principal ports of entry into this country Federal imports laboratories where all foods offered for entry are analyzed and if found not to be in compliance with our food laws, are returned to their foreign owners. This has stopped all entry of misbranded and adulterated foods into the United States.

Spices did not escape the efforts of the adulterator. They were grossly mixed with ground olive stones and ground cocoanut shells. Cayenne pepper was mixed with gypsum and colored with a bright red dye to hide the adulterant. Black pepper was much adulterated with pepper shells. As white pepper is made by taking off the outer shell of black pepper, the shells were a waste and many of them were disposed of by mixing them with the black pepper.

Standards established by our food laws require jellies, james, preserves, etc., to be made from the fruit juice and cane sugar, but before these standards were established these products were made in many cases of starch, gelatine, glucose, an artificial fruit flavor, and colored with dyes.

Timothy and millet seed was in some cases used to imitate the seeds of the fruit. An apple base was much used in certain brands of these products and is still used but now the label so states while formerly it was labelled as being made entirely of the more expensive and desirable fruit. Apple juice is the most plentiful and cheapest of the fruit juices and being rich in pectin jellies very easily, while the juice of most of the common berries jellies with difficulty or not at all. These facts have lead to the practice of using apple juice as a base for mixing with other fruit juices for jelly and jam. This practice is of course harmless and legitimate but the label must show the consumer that the produce has been made from these ingredients.

Table syrups did not escape their day of adulteration. Maple syrups were grossly mixed with cane syrup or made of cane syrup entirely and artificially flavored like maple. Glucose or corn syrup was also sometimes used in whole or in part. Dr. Wiley once made the statement that there was more maple syrup made in the city of Chicago than in the State of Vermont which no doubt is true. However, a survey of the labels on this class of goods now on the grocer's shelves will show that they are branded "cane and maple syrups" or "pure maple syrup" and the statement can be taken as true as proven by samples analyzed by this department, as well as by the Federal authorities. Maple sugar was likewise adulterated but is now properly labelled.

Cane sugar has rarely if ever been adulterated. However, there is still some complaint from housewives that beet sugar has been substituted for cane sugar but since they are alike chemically there is no means of telling if this is the truth.

Soda waters have never been subject to much adulteration, except that impure dyes were sometimes used and they were not always produced under sanitary conditions. Saccharine was and is still sometimes used as a substitute for sugar but the law forbids this practice as saccharine is considered injurious. The recent high price of sugar tempted many manufacturers of this class of goods to substitute saccharine, which is 500 times sweeter than sugar, for sugar, and the department has prosecuted a considerable percent of these manufacturers this summer for this violation of the law.

Vinegars have been no exception to the manipulations of the manufacturer.

As cider vinegar has always been the principal vinegar of commerce and has commanded the best price, manufacturers have yielded to the temptation of adulterating it. A common form of adulteration, still practiced to some extent is to mix distilled vinegar, which is a dilute solution of acetic acid, with enough cider vinegar to give it the odor and color of pure cider vinegar, sometimes adding color to intensify the deception. Again distilled vinegar is colored and sold for cider vinegar. Malt vinegar has also to some extent been mixed with distilled vinegar. Distilled vinegar which is made by passing dilute alcohol over vats filled with wood shavings impregnated with mother of vinegar, where the alcohol is converted to acetic acid. This is the cheapest vinegar made, hence is used for adulterating.

The sour principle of all vinegars is the same, i. e., acetic acid, and while none of these adulterations are injurious they are fraudulent and forbidden by law. In some states distilled vinegar can be colored and sold as "colored distilled vinegar" but the laws of this state forbid the use of color and it must be sold in its natural colorless state, because many grocers will sell it, if colored, for cider vinegar, thus perpetrating a fraud upon the consumer.

Canned meats have never been seriously adulterated but it is interesting to note that prior to the enactment of pure food laws, potted ham was upon every grocer's shelves while a search now will reveal in its stead cans labelled "Potted Meat, Ham Flavor."

Canned vegetables have been subject to much adulteration with water, but standards, which are being rapidly fixed, are correcting this evil by defining the amount of free liquid which will be permitted in cans of these products.

A practice of soaking dried lima beans and peas, and canning them under labels of the fresh products was at one time much in evidence but since the law has required these to be labelled "Soaked Beans" or Soaked Peas" they have become scarce.

Catsup was in many cases made from the trimming of tomato canning factories and hence contained many molds and bacteria.

Many manufacturers have had to answer in court for this practice but catsup like other foods is being standardized on the basis of percent of molds and bacteria present with the result that the manufacturer is compelled to use clean, sound fruit to make a legal product.

In the preparation of rice for the market the outer hull is removed and the grains are polished by agitating them in suitable machines with talc (Soapstone) and glucose. The law permits this practice but the package in which it is offered for sale must state that it is coated with talc and glucose, to be removed by washing in water before cooking.

Many can, no doubt, remember the tub of oysters in the meat market or grocery with a liberal piece of ice floating in it and you were compelled to pay oyster prices for a considerable amount of water.

This fraudulent practice is forbidden by law and oysters are now sold with their natural liquor only and this can not exceed 16-2/3%.

As we are all inclined to buy our foods largely by appearance, canners made a practice of coloring string beans, peas and pickles a beautiful green by using salts of copper.

These salts are injurious to health and their use was likewise forbidden by law in all foods.

The use of preservatives became a general practice and many of them were injurious. Boric acid and Salicylic acid was used without regard to the health of the consumer as it has been proven by experiment that these acids will produce derangements of digestion and health when taken with foods. The use of these is now forbidden by law and the only preservatives now permitted is sodium benzoate and this, not in excess of 1/10 of 1%. Manufacturers contended that it was impossible to keep certain foods from spoiling without using strong preservatives, but they have found out that by using clean sound products and preparing them under sanitary surroundings that they will keep indefinitely without preservatives.

It will be seen that prior to the passage of pure food laws, adulteration and misbranding was in general practice. The dollar was placed above honesty and health and the consumer had no means of knowing the quality of the food he was buying. Manufacturers vied with one another in seeing who could produce an article of food the cheapest. The conditions created a demand for remedial legislation, which was furnished in the pure food law and the desired result has been placed on an equal basis, dishonest competition has been destroyed and the consumer can buy honest goods honestly labelled.

CLEAN FOODS.

When sanitary laws were first proposed many people considered it a fad of short life but time has demonstrated that there was real need for this sort of legislation. One can easily remember seeing candies spread out in great array upon long counters unprotected from flies, dust and the fingers of customers.

Bakery goods were likewise displayed in the open where the flies flew from the dirt in the street or neighboring dung hill and fed upon unprotected foods which we were compelled to buy. Screens were often missing upon doors and windows of many places where foods were offered for sale.

Contrast these conditions with what we find today. Candy and bakery goods, meats and all foods, unprotected with a rind, are in clean glass cases away from the flies and dust, reducing the danger of spreading disease to the minimum. It will also be noticed that street displays are raised at least two feet from the sidewalks. The open barrels and boxes of food have vanished from the grocery stores and appear in inviting sanitary containers uncontaminated with the dust of the street and store and the vermin of cats, rats and mice. The slaughter house where our meat is prepared has changed from the tumble-down shack to a real building, with cracks sealed and screens on the doors and windows and the awful stench of decaying waste is not noticeable. The health of the public is safeguarded by this law and the old order has gone never to return.

EGG INSPECTION.

The Iowa Egg Law is generally conceded to be one of the best in the country. While its requirements are extremely moderate, they are nevertheless rigidly enforced as is attested by the fact that no fewer than fifty-eight dealers were prosecuted for its violation during the past year and a half. This law differs very little from the so-called Uniform Egg Law which has been agitated for some time. Missouri, South Dakota and Illinois have also adopted similar laws, and when the other states have followed suit, it will greatly facilitate the regulation of eggs entering into interstate commerce.

The high price of eggs during the last two years has caused the appearance on the market of so-called egg substitutes under various trade names. This department has ruled that the word "egg" can not be used on packages of these products unless they contain at least 50% of dried egg. Our examination has shown that most of them contain little or no dried egg but are composed principally of corn starch with small amounts of rice flour, dried milk and sometimes baking powder. In the majority of cases they are a fraud as they are in no sense a substitute for eggs. If the housewife wishes this kind of a mixture she has most of the ingredients in her kitchen. As long as these preparations are properly labeled, the department cannot prevent their sale.

While reliable information showing the number of eggs produced is not available, Iowa probably ranks first as an egg producing state. The total income received by the state from this source, during last year, probably amounts to about $52,000,000.00. The average farm price for eggs during this period was forty-three cents, which means that 121,000,000 dozen of eggs were marketed. This does not take into account, of course, the large number consumed on the farms of the state.

The following tabulations showing the contrast between present egg prices and those of a few years ago, will be of interest.

AVERAGE PRICE PAID TO IOWA FARMERS FOR EGGS ON THE FIRST DAY OF EACH MONTH OF THE YEARS SHOWN.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910	28	28	21	18	18	17	16	14	17	20	22	25
1911	26	21	14	13	14	13	12	12	14	17	20	25
1912	27	28	23	17	17	16	15	16	17	19	22	25
1913	23	20	17	15	15	16	15	14	16	19	23	29
1914	27	26	22	16	16	16	16	16	20	21	21	26
1915	28	30	22	16	17	16	15	15	16	20	23	27
1916	28	27	22	17	18	19	19	20	21	26	30	34
1917	35	36	33	25	30	31	27	28	32	34	35	39
1918	42	47	38	30	31	28	28	33	33	39	42	51
1919	56	45	30	34	37	38	33	37	38	47	52	59
1920	55	45	39	37	38	33						

The world wide increase in the price of eggs is not alone responsible for the high market value of eggs today. Quality plays the important part as Iowa eggs net an unusually high price on every market in the country. This proves conclusively that from the standpoint of the producer as well as the consumer, it is well worth while to rigidly enforce existing laws.

There is only one method for distinguishing good eggs from bad ones, or which can be used for the purpose of grading, and that method is candling. Of the numerous devices sold for this purpose, the single hole candle operated in a darkened room has proven the most satisfactory. Devices designed for handling more than one egg at a time permit mistakes and carelessness to creep in and as far as this department is concerned, their use is not advised.

Since the question is often asked, "Who must be licensed," the regulation pertaining to this subject is herewith reprinted:

"WHO MUST BE LICENSED?"

The law requires the following classes of dealers to take out egg dealers' licenses:

1. All merchants, hucksters and others buying eggs from producers unless such producers are also licensed egg dealers.

2. All dealers, regardless of the nature of their business, who sell eggs in quantities in excess of one case at a time.

The following are not required to take out a license.

1. Merchants who buy all their eggs from licensed dealers and who do not sell in lots greater than one case.

2. Farmers and other producers of eggs who do not sell or trade in eggs other than those produced by them or their tenants.

3. Bakeries, restaurants, etc., buying eggs for their consumption only are not classed as engaged in the business of dealing in eggs and are, therefore, not required to secure a license to buy the eggs consumed by them.

The licenses now in force expire March 1, 1921, at which time a new license must be taken out. A suitable blank for applying for the license will be sent to each dealer having a license expiring on that date, before it expires.

RULES AND REGULATIONS GOVERNING ISSUANCE OF LICENSE.

1. After May 25th, it is necessary that all dealers engaged in the business of buying, selling, dealing in or trading in eggs, except those retailers who buy direct from dealers, having an Iowa license, and who do not sell in lots greater than one case, obtain an egg dealer's license.

2. The license fee is $1.00 for the period ending March 1st, each year.

3. A separate license must be obtained for each place of business where eggs are sold.

4. Each license is numbered and numbers are usually assigned in the same order as applications are received.

5. Farmers and other producers of eggs are not required to secure a license for the purpose of selling or trading in eggs produced by them.

6. Buying, selling, dealing in or trading in eggs in violation of the egg law, by any person, firm or corporation is an offense and renders the offender subject to a fine of not less than $10.00 nor more than $50.00.

MARKET MILK.

With the growth of the urban population of Iowa, the city milk supply is rapidly becoming a matter of tremendous importance. As our cities become more congested the greater will be the need for strict supervision of market milk. The time has actually arrived when it appears as though the present method of inspection should be changed. The amount of money placed at the disposal of the department for carrying on this work is decidedly inadequate.

While it is true that none of the cities under state inspection have suffered any epidemic of disease and that the milk supply is on the average quite good, there can be no guarantee of continued immunity under the present system.

Any system of inspection which places the inspectors on a part time salary basis can not be entirely satisfactory yet in most instances this condition exists. The law permits state inspection of city milk supplies on a per diem basis, the number of days varying from ten to fifteen according to the population. It is not my intention to advocate that inspectors be placed on a full salary at the expense of the state. A far better solution is to have the salary paid jointly by the state and city as is done in Des Moines and one or two other cities. If the cities will cooperate with the department in this respect, it would permit the securing of trained inspectors who could devote full time to this work. Adequate laws laying down strict rules of supervision, such as farm inspection, compulsory pasteurization, etc., could be made with assurance that they would be enforced.

As is true among other producers, milk producers are displaying considerable activity in organizing to market their milk as a group. While such a movement was at first looked upon with some trepidation in most parts of the state where these organizations were in operation, the result has been entirely satisfactory. Producers have shown their willingness to be fair in setting the price which the milk should bring, while on the other hand distributors find that the rules laid down by these organizations are a protection to them as well as the producers.

There is still a need for much work to be done in calling the attention of the people of the state to the value of milk as a food. Dieteticians recommend the use of at least one quart of milk a day per person. In Iowa the consumption is somewhere about four tenths of a pint per person per day. It is indeed regrettable that the residents of one of the greatest dairy states in the union should be so little cognizant of the value of these products. A steady use of milk will mean a healthier population and a saving on food bills.

An effort to stimulate consumption of milk was conducted among the school children of Iowa in twenty-nine counties by this department, the Iowa Dairy Council and the Extension Department, of the Iowa State College, last spring, in a campaign lasting three weeks. During that time 387 schools were visited by 19 speakers and the story of milk told to 53,812 pupils and 2,709 teachers. Forty evening meetings of the parents of these children were also held in connection with this campaign, which were attended by audiences totaling 4,094 people. It is, of course, extremely difficult to accurately estimate the results of such a campaign but numerous reports from these sections tend to show that the results were surprisingly good. Other campaigns will be carried on in other counties and the scope of the work widened with a view of bringing home the messages to nearly every man, woman and child in the state of Iowa.

It is entirely fitting that the attention of the milk dealers of the state should be called at this time to the necessity of doing their part in this great work. No matter how much educational work is carried on or how much advertising is done it can not be fully effective as long as there is a feeling among consumers that the product is not absolutely pure. Telling mothers that milk is an ideal food for their children will have little effect as long as these mothers summon up pictures of myriads of dangerous bacteria in each drop. To obtain the greatest results from campaigns of this kind, a dealer must, as an individual, follow them up with methods designed to bring home to the consumer the fact that his milk is free from contamination. To be in a position to do this he must, of course, take pains to see that his plant is kept in an absolutely sanitary condition and that only high quality milk, preferably pasteurized, is put out by his plant. The same thing applies to all dairy products, it is true, but to none does it apply in the same measure as it does to milk.

While the general tendency in the past has been toward the amalgamation of small dairies into one or more large market milk plants, the past year has seen practically no consolidation of this kind. Iowa still continues to be a state where small milk men predominate. Most of our cities, even large ones, still obtain their milk supply from small dealers who either produce the milk themselves or buy from one or two neighbors. While this practice usually results in the milk being placed in the hands of consumers a short time after being produced, there is on the other hand, the objection that small dealers seldom possess the equipment to safe-guard the milk supply, which is found in large plants. From an inspection standpoint a city milk plant is much more easily controlled than numerous small individual farm dairies. These statements are made not with the intention of showing any favoritism toward the larger plants but merely to attempt to bring out some of the difficulties presented in properly controlling a milk supply coming from numerous small sources.

As stated elsewhere, a conservative estimate of the money expended for market milk in the state during the past year is very nearly twenty-nine millions of dollars. This figure may fall considerably below the amount actually consumed each year in the form of fluid milk. As a matter of fact it probably represents only something over one-half of the annual consumption of milk since it does not take into account the enormous amount used on the farms of the state. The three hundred and eighty-seven reports from which figures were compiled, include only the milk sold for consumption in cities and towns. Because of the fact that a great proportion of these reports were received from small dealers, duplication and other mistakes have probably made the figures a trifle high, but as stated when the total consumption is considered, it probably falls short of the actual mark.

Because of the unsatisfactory manner in which many of these reports were returned, it has been almost impossible to tabulate careful statistics. Only a very small number of the small dealers keep accurate records and in many instances the report of receipts received from the sale of milk and cream, and like questions, were apparently very poor guesses. None of those reporting appeared to be modest about their claims for an average fat test of their milk. In checking over a large number of these figures with those received from the city milk inspectors it was found that the tendency was for each man to give himself credit for richer milk than he was actually delivering.

As was expected, most of the dealers had a surplus of milk in the late spring and early summer months and suffered from a shortage during the winter months. Only a very small percentage of Iowa's market milk is pasteurized according to the reports. An attempt to obtain figures regarding the number of cows furnishing milk for this purpose, proved decidedly unsatisfactory. In general, it was found that the milk was paid for on the Babcock test basis by the larger plants and by the gallon by the smaller dealer. While automobile delivery is apparently growing in popularity a large number of horse drawn vehicles are still in use, a number expressing the opinion that the frequent stops and starts necessary in retail delivery making the use of an auto truck too expensive.

While dealing upon the subject of milk distribution, it might be well to bring out two reforms which might well be brought about in the city milk business. One of these is the matter of delivery duplications and the other the question of milk bottle losses. Regarding the first point: While the tendency is toward the delivery of milk to the consumer by way of the grocer, the greatest amount is still delivered directly to the consumer by the "milk man." In some towns this means that as many as six different distributors are delivering milk in the same block. The waste involved in this method of distribution is enormous. If some plan could be worked out whereby deliveries could be combined, a great saving could be made which would prove to the advantage of both distributor and consumer. In regard to the second point, i. e., milk bottle losses, the establishment of milk bottle exchanges has proved very satisfactory in a number of cities in other states. By proper co-operation among dealers, this sytem will not only enable them to have their own bottles returned but it will also enable them to make stringent regulations regarding the return of milk bottles by grocers or consumers. Certain it is that with the present high cost of glass bottles, stringent measures must be adopted to reduce this phase of milk distribution cost or else it must be met by an increase in milk prices. This department is not inclined to be over-patient with users who fail to return these bottles to their rightful owners. Information gathered from milk dealers shows that it is the grocer and not the consumer who is the greatest offender. Whether the grocer makes no effort to have his customers return these bottles or whether they are used for other purposes in his store, can not be determined, but the fact remains that he is the source of the greatest losses. While there is no desire on the part of this department to work any hardship upon any one, it is almost inclined to recommend that such a high valuation be placed upon milk containers that the consumer or grocer could not afford to retain them.

ICE CREAM.

The past year has probably been the most crucial ever encountered in the ice cream business. High priced raw materials, (when, indeed, they were obtainable at any price), made it extremely difficult this year for the manufacturers of this product. The shortage and high price of sugar was a source of constant worry to those who were forced to meet competition of others who had succeeded in laying up a large supply of this product before the break in sugar prices. Some manufacturers were forced to pay almost any price demanded in order to obtain a sufficient supply to enable them to fill their orders. When the break did come, it found a large number with a big supply of high priced sugar on hand which must be used in competition with those purchasing it at a much lower figure.

Surprising as it may seem, the high prices which necessarily prevail because of these conditions did not curtail consumption of ice cream to a great extent. Reports compiled by this department placed the consumption at 5,436,755 gallons which sold for a total of $6,795,943.00, an increase of nearly $200,000.00 over last year. This in the face of a predicted reduced consumption.

The war tax placed upon the sale of ice cream is undoubtedly partly responsible for the failure of the public to consume a larger amount of ice cream. This is brought about through the tendency on the part of certain retailers to advance the price to the next even nickle when a war tax of one or two cents is placed upon each dish served. That is, a dish of ice cream retailing for twenty cents incurs a war tax of two cents. Many retailers simply advance the total price to twenty-five cents and absorb the war tax. Needless to say this extra three cents is not shared with the manufacturer and from his standpoint is harmful since there is no gainsaying the fact that this levying of an additional five cents does keep many people from making a purchase.

While it is still a little early to be making predictions, I feel assured that with the continued decrease of sugar and other raw materials, next spring will see a decline in the price of ice cream, particularly in those cities where the price has arisen to $1.40 or $1.50 a gallon wholesale. A price movement downward will be viewed with approval rather than regret by practically every ice cream manufacturer in the state, I feel certain, providing, of course, that it comes as a result of lower raw material and manufacturing costs.

WEIGHTS AND MEASURES.

I have found it necessary to assign the entire time of three men to the duties of heavy scale inspection and to use such time of our Food and Dairy inspectors as they could spare to the inspection of counter and cream scales in retail establishments and cream stations. With the prevailing high prices for all commodities, the necessity of accurate scales and weights is apparent. Demands from grain and stock buyers, farmers, canning factories, sugar refineries and merchants for emergency and periodical inspection of their scales have been exceedingly heavy. Mine owners and miners have also made frequent demands for this work. Dealers, consumers and workmen have all learned to have confidence in the accuracy of the scales approved by this department, and insist on frequent inspection to insure fair dealing. The department is also called upon to make a large number of special trips for inspections for which private companies are willing to defray the expense.

As competition has grown keener and prices have risen higher, the number of requests for scale inspection has doubled and trebled. The department, with the number of inspectors at its disposal, has been unable to answer requests as promptly as should be done. There is also a great deal of correspondence resulting from daily reports of inspectors, shortage reports from various sources, warning reports, requests for scale inspection, prosecutions, complaints and reports of similar nature, which demand a large amount of attention from the Chief Inspector of Weights and Measures.

During the year ending November 1, 1920, the department inspected 3247 "heavy" scales, that is, scales used by grain elevators, coal mines, retail coal dealers, railroad stock scales, sugar refineries, canning factories, etc. The revenue received by the State for the inspection of these scales amounted to $9,838.15. The average charge for the inspection of wagon scales is $3.00. The revenue received by the State for scale licenses is $5,283.00. Of the number of scales inspected 323 have been condemned for repairs; more than 289 were adjusted or their operators were instructed to make changes that would render them accurate.

Since the Law became operative, hundreds of scales and measures of various types have been confiscated and condemned. The use of the auto truck has been the cause of many new wagon scales being installed as the capacity and construction of a great many scales is such that they are too light for the loads which are now being hauled. The department records show that there has been 4,300 platform scales, 4,800 counter scales, 4,000 creamery scales inspected. These items do not include the number of weights and measures submitted by cities, firms and individuals for verification as to their accuracy.

IMPORTANCE OF WORK.

The Weights and Measures Departments throughout the United States, during the period of the world war, put forth every effort to do their bit, by checking more closely than ever before the weights and measures of the thousands of commodities so sold. The prices of commodities since the close of the war have soared even higher and hence it is necessary to increase our activities. Few people realize the importance and wide scope of the Weight and Measure Inspector's field. Iowa's billion dollar crop must be weighed. Her thousands of cattle, hogs, and sheep must all be driven over the scales before being sent into the market. The Dairy and poultry products, garden truck, orchard crops, wool and the numerous other such products of Iowa are sold by the pound. Seven million tons or more of coal, hundreds of thousands of tons of sugar beets and sweet corn, and thousands of tons of gypsum rock mined in Iowa are weighed over scales whose accuracy is determined by the State Weight and Measure Inspectors, and still we have not mentioned the many millions of dollars worth of groceries and dry goods purchased by Iowa citizens annually, nearly all of which are sold by weight or measure.

BREAD.

The big discrepancy between the weight of a loaf of bread and the weight stated on the wrapper which developed in the last two years, led the department to take the matter up directly with the bakers, with the result that a conference was called of all the bakers in the State at which meetings the bakers were advised that this practice must cease. The following ruling of the department was made May 13, 1920:

Ruling.

TO ALL BAKERS AND THOSE INTERESTED IN THE INDUSTRY:
Gentlemen:

This is to advise you that on and after July 1, all bread wrappers must have plainly and conspicuously printed on the body of the wrapper the net weight of the package. The Attorney General holds that expressions or statements like the following—"18 ounces or over" and "not less than 12 ounces" are meaningless and not in conformity with the law.

There appears to be some misunderstanding as to the requirements between now and July 1. The ruling was gotten out about May 1, and two months given in which to use up old wrappers. In ordering new wrappers, why not standardize the loaf to 12 ounces, 24 ounces, 32 ounces, then make the price to cover the different sizes, rather than to change the loaf to fit the price. There is little evidence of stability in the flour market and trouble will not be eliminated until the loaf is standardized.

W. B. BARNEY,
Commissioner.

The results have been an improvement in these conditions.

THE VIGILANCE OF THE PURCHASER IS NECESSARY TO SECURE HONEST WEIGHT AND MEASURE.

Honest weight and measure can only be secured through the vigilance of the purchaser. The high cost of the necessaries of life is very often due to the avarice of man and is not caused by any scarcity of commodities. Those necessary foods must be protected so as to cheapen them to the consumer, yet this method of protection should not be burdensome to the dealer nor to the consumer. The abnormal conditions developed as a result of the war have inspired profiteers to seek enormous profits for the goods they sell.

High prices have resulted in a noticeable tendency toward short weighing on the part of a number of dishonest merchants. The fact that selling 15 ounces to the pound has proved a profitable source of income at present prices, was too big a temptation for some merchants to withstand. This department has attempted to impress upon the house-wife and the public, in general, the necessity of buying by weight. The necessity of being especially careful in purchasing from street venders has been impressed upon the consuming public, but despite all of our efforts, frequent cases of short weights continue to appear. To carry on this work effectively, more men should be added to our force. A common source of dishonest practice on the part of some merchants, generally considered reputable, was found to be the advertising of a certain commodity at an unusually low price and then making up the difference by short weighing on this particular commodity. In every instance where short weighing was found to be in vogue, the department inspectors were instructed to prosecute relentlessly, heavy fines usually resulting.

One important phase of this work which is necessarily neglected because of an insufficiently large force of inspectors, is the work of cream scale inspection. With butter fat selling at its present high figures, it is easy to see that a faulty scale can mean considerable financial loss to either the buyer or the seller. This work, as stated, has been greatly neglected inasmuch as we have been forced to depend upon our Dairy and Food inspectors to make these inspections in addition to their routine work—something which they really have not time to do.

The department has done a great work in checking gasoline pumps and measuring devices with the result that during the past year we have made a thorough survey of these pumps. Our investigations show that a very considerable number of these pumps are inaccurate and we feel that the public have received a large financial benefit from these investigations. To assist us in the work the department has purchased a number of practical standard measures which have assisted us materially in our work.

We have had many complaints against coal dealers delivering less coal than was purchased and paid for and a special effort has been made to have the inspectors reweigh loads of coal being delivered to consumers. In several cases dealers have been detected in this dishonest practice and have been prosecuted in the courts. Some of the shortages which have been detected are as follows:

590 lbs. short on 4,000 lbs.
675 lbs. short on 4,000 lbs.

The above two were both from the same dealer.

375 lbs. short on 6,000 lbs.
380 lbs. short on 4,000 lbs.

PEDDLERS WATCHED.

The itinerant vendor, or peddler, has been the cause of more trouble to weights and measures men than any other type of merchant. This class of trade is made up of individuals of miscellaneous morals and dispositions, many of them honest and willing to do what is right, but, we are sorry to say, a great number with tendencies to increase their profits by trickery if given the chance. So it is that they are kept under the most constant surveillance at all times. Many of them persist in using incorrect equipment; others take chances and give short weight and short measure; however, where cases have been found to warrant, they have been severely dealt with and there is an increasing tendency towards betterment among dealers of this class. To give an example of the extent of fraud some times practiced by peddlers, it might be stated here, as a matter of interest, that during the past month the most glaring and largest discrepancy discovered originated with a vegetable peddler, who on a sale of ten (10) bushel lots of potatoes short-measured his customers two bushels on one and one and one-half bushels on the other. In each case they were prosecuted and paid a fine of $20 and costs. Examples such as this strengthens our opinion and advice to the public in general that after all, the merchant with a permanent place of business is the best to trade with, for while his prices may appear higher than those of the peddler, who offers inducements in the way of low prices for his wares, depending on some dishonest method to make up the difference, full quantity is more likely to be received at stores in the majority of instances.

REGULATION RELATING TO THE OPERATION OF THE BABCOCK TEST.

For the purpose of providing official supervision of the operation of the Babcock test in all licensed receiving stations, conducted for the purchase of butterfat, either in the form of cream or milk, to promote fair competition, and to protect the producer of butterfat, thereby giving more confidence to the producer, in the system of determining the per cent of butterfat in cream or milk, the following regulation has been promulgated:

"That all individuals, corporations and partnerships, authorized by license or permit to conduct the Babcock test in the state of Iowa, shall retain within the premises the exact, properly labeled samples of cream or milk from which the butterfat test has been conducted, until 6 P. M. of the day following the application of the test, where daily testing is practiced, and until 6 P. M. of the second day following the application of the test where composite testing of individual deliveries is practiced. In case of Sundays and legal holidays intervening, the samples shall be held one additional day.

"Upon such occasions as may be determined wise, this department or its inspectors may order any sample or samples held for a longer period than provided for by these regulations.

"This ruling will be effective on and after June 1, 1920."

The foregoing regulation will be of particular interest to a large number of Iowa merchants, especially those in the smaller cities and towns, where the buying of cream is extensively practiced by grocers, butchers, and other merchants.

The ruling is designed as a protection for the producer and the purchaser alike. Buyers who operate the test honestly and efficiently and pay accordingly, will welcome a measure of this kind. It will be found particularly valuable as a means of checking up station shortages. The object of such a ruling requiring samples to be held is to enable an inspector of the Dairy and Food Department to check up disputed tests. The territories of the department inspectors are so arranged that practically all of them can reach certain points in their territories within twenty-four hours, and thus if a complaint is made that a certain buyer is over or under reading the Babcock test, by using the telephone, it will usually be possible to have an inspector on the ground to check up the test before the termination of the period which it must be held.

YOUR HOUSE IN ORDER.

The grocer perhaps as much as any other merchant unintentionally violates the law because he fails to familiarize and post himself upon the laws of his State and Country.

He should know when an article of food is offered to him, whether it is labeled to comply with the law, both as to net weight and composition.

The net weight must be stated plainly on all packages of foods, in terms of the largest denomination i. e., a package weighing 18 oz. should be labeled 1 lb. 2 oz.

A jam or preserve made principally of apple with a small amount of other fruit is a compound and a list of the ingredients must appear upon the label. The source of an article must not be mis-stated; for example—Italian Olive Oil must come from Italy—Grecian Currants must come from Greece, etc. It is your business to know that the goods you handle comply with the law in every detail as you are responsible under the law and the laws of Iowa do not extend beyond its borders. If you buy your products from other states you are guilty if they do not comply with the law. You should know that a condensed milk made from skimmed milk and cocoanut fat must be labeled "Imitation Evaporated Milk," and must not be sold as condensed milk, for if you do, you will violate the law and be guilty of unfair practice. Also that oleomargarine must be labeled "Substitute for Butter" and sold without any color under the State Law and each package stamped with the weight and your name under the Federal Law.

New goods should never be placed in front of old goods on your shelves as goods will spoil or the labels will become soiled and faded with age and render goods less salable and cereals become infested with weavils making them a total loss. Extracts should never be sold when there is a suspicion they are being used as a beverage.

Licenses which you receive should be tacked up on the wall where they will not be lost and can be seen by the members of this department when calling upon you. Poor business methods are prevalent among grocers. They have a poor cost accounting system or none at all. They fail to charge up their own services and at the end of the year are unable to tell if they have had a profitable business.

The cleanliness of the store and stock is an important factor in handling foods. How inviting is a store that has its cheese and other unprotected foods in a clean glass case free from flies and dust. The shelf goods neatly arranged and free from any accumulation of dust. The floor of good material and clean, with baskets and barrels of cookies, crackers, etc., protected with a tight cover.

It has been a long tedious task to stop the grocer from buying and selling eggs which were not edible and in spite of the law forbidding this practice and many prosecutions, some grocers still persist in handling bad eggs. If every grocer would let the producer know that there was no market for bad eggs, there would be none on the market. Proper candling and the return of all questionable eggs to the producer will correct this evil and bring a better price to the grocer and producer for his eggs. When we consider that the value of Iowa's eggs probably amounts to $50,000,000, annually, it is evident that the elimination of the bad eggs will materially increase this sum.

Vegetables and fruits should never be bought or sold by the basket, but by weight. The law fixes standards for these commodities in terms of pounds per bushel and if sold by the bushel, the legal number of pounds must be given. Accurate scales are an asset to your business and when obtained should have proper care to keep them accurate and prolong their life. When a scale is out of adjustment it is as apt to be against you as your customer.

REPORT OF THE STATE DAIRY COUNCIL.

By W. A. Wentworth, Secretary.

Herewith we are pleased to hand you a report of the Dairy Council movement.

At the outset we wish to refer to the work of the National Dairy Council. In a very complete report submitted by the National organization we find that during the past year they have distributed throughout all parts of the United States more than THREE MILLION PIECES of literature in the form of colored posters, booklets and leaflets. This material has gone into the homes, schools, educational and public institutions and has been displayed at fairs, a large variety of conventions, and has been largely reproduced in the press. The demand has been so great for these that in several cases as many as four different editions have been printed. Had the Council finances permitted, it would undoubtedly have been possible to distribute twice the amount of literature.

During this time a total of 15,000,000 people have been reached in the United States. To these people the story of milk and its products, as an economical and essential food has been told once, twice and in many cases even oftener. This work should be increased until the total population is reached and told many times the truth of dairy products.

In addition to the number of people reached in the United States, requests have been received from many foreign countries, including among others Australia, England, France and Canada. This demonstrates the wide distribution of the publicity which is being handled by the Council. There is available, at this time, for distribution, an educational poster, on "Ice Cream, A Nutritious Food." Four posters in colors, respectively Use More Milk, Use More Butter, Use More Ice Cream and Use More Cheese, showing very strikingly the comparative values in dairy foods and ordinary staple foods, have been in great demand. Pamphlets entitled "The Dairy Recipe Book," containing 150 recipes of dairy dishes, an illustrated booklet, entitled "Food Facts," and another entitled "Milk, The Necessary Food," have received unusually wide distribution. In addition to these, the Council is prepared to provide newspaper plates for use in commercial advertising. They have also a series of colored slides for use in motion picture houses, and at the present time have the Milk Dairy Plan on motion picture film which can be secured and used in motion picture houses.

In all of this work the National Dairy Council has expended only about $56,000.00. To obtain the same results in nation wide newspaper advertising, an expenditure of more than half a million dollars would have been necessary.

STATE DAIRY COUNCILS.

At the present time there are functioning in the United States twelve dairy councils, these being in the states of California, Oregon, Colorado, Idaho, Minnesota, Iowa, Missouri, Wisconsin, Michigan, Pennsylvania, Connecticut and the New England states. At a meeting held in Chicago in the 12th day of October, a plan was developed for closely federating these several state councils and effecting a successful relationship with the National. At the present time this matter has not been ratified by all of the states but will be submitted to the members as soon as definite ratification has been completed. This is in the hands at the present time of the officers of the various state councils and we feel is receiving very careful attention before ratification is effected.

THE IOWA DAIRY COUNCIL.

The Iowa Dairy Council has been quite closely affiliated with the National, and in all of the work which it has done up to the present time has used the material issued by the National organization.

A large share of the time during the past year has been devoted to furthering the organization. At the present time the work is being supported by one-half of the local creameries of Iowa, by all of the ice cream manufacturers, by the central creameries, most of the milk dealers and the milk producers in many localities. During the winter of 1920-21, it is planned as nearly as possible to complete the work of organization among all the branches of the dairy industry of the state. This should then make it possible to have sufficient funds within the state to make the work much more effective and at the same time support to a considerable extent the National Dairy Council which alone can reach the market upon which the butter of Iowa is sold.

To report the work which the Iowa Dairy Council has done during the past season in promoting the interest in the food value of dairy products, we cite you first to a campaign which was conducted through the schools of thirty-one counties of Iowa during the last three weeks of May. In this campaign the Dairy Council merely served as the directing force for speakers provided by the Dairy and Food Commission, the Agricultural Extension Department, the State Dairy Association, and the State University of Iowa. In this connection we wish to make acknowledgement to each of these for the very splendid support given. A total of nineteen speakers were used in this campaign. In a general way three speakers were employed for three days in a county with the county agent, the county superintendent of schools and the home demonstration agent being local directors of the work. Most of the schools in the counties covered were reached and a total of 53,812 school children and 4094 adults heard the story. In this campaign 387 schools were visited, talks were made in factories, picture theaters, before commercial clubs and women's societies to the number of forty. The indications are that because of the very satisfactory results obtained during this campaign, that it will be continued and increased another year.

The Iowa Dairy Rally was held at Waterloo in July to interest the county agents in the further activities in dairy production work. At this time many speakers of note were provided and quite a large representation of the county agents were present, as well as many members of the Agricultural Extension Department, the Home Demonstration Agents and members of the industry. Out of this meeting we have found that there seems to exist a closer relationship between some of the people engaged in education work and the dairy industry. There can be no denying the fact that in proportion to the importance of the industry to Iowa, it has not received such support from these forces as would be warranted.

During the county fair season thirty-nine fairs were provided with posters and other literature for display and distribution, largely by the county agents and home demonstration agents, together with some members of the Dairy and Food Commission. In a few cases county nurses have been provided with the same material; in addition to these fairs a booth was maintained at the Iowa State Fair and also one at the Iowa Dairy Cattle Congress showing to the visitors somewhat of the value of dairy products in the way of graphic reproduction on a large scale of a milk bottle, print of butter, brick of ice cream, and a slice of cheese. The milk bottle rotating set forth concise statements regarding milk and its value, particularly to the child. The other replicas each told briefly of the value of the product which it represented.

During the Iowa State Teachers' Association convention held in Des Moines on November 4 and 5, it was arranged to have talks on dairy products made before several group meetings of the teachers. This appears to have been very successfully carried out by the ladies who spoke, for in the reports submitted following the convention this statement was made, "So far from every meeting there has been some one who wanted some definite work done" in their schools in the nature of further interesting the child in the use of dairy products.

We are at this time checking up the sale of butter in the local markets in the state of Iowa. There is no way, as yet, to determine how much butter is sold in Des Moines or large cities, but in towns of 1,000 or smaller where one creamery supplies practically all the butter used, it is possible to get an idea of the amount sold. We can find out how much they are selling this year and how much they sold last year and before. We are establishing 1917 as the normal consumption, prior to the war. Then butter was selling at about 37c a pound and shortly the price began to rise and what we want to know is how have sales continued during the past four years? We want to cover a good many more creameries before anything definite is said; however in general, up to the present time, we find that in 1918 there was a decrease of about 16% under 1917 in the consumption of butter in these smaller towns of Iowa. That includes the patrons of the creamery and the store sales in the town. In 1919 the average increase is about 5%, that is the stores bought and the patrons used about 5% more than in 1918. Now, in 1920 we find a variation in figures and at the present time it is not safe to say that an average prevails, but every creamery visited shows increases varied from 8% to 16% over the sale in the respective towns during 1919—that with the price of about 1½c more than last year. Better knowledge of dairy products is increasing its consumption in Iowa. If it is accomplishing these results in Iowa, no doubt it is elsewhere.

In the Dairy Council work thus far sufficient progress has been made in organization that all of its present members should feel very optimistic in regard to the support which will be received. At the close of another year it will undoubtedly be possible to say that from seventy-five to ninety percent of the members of the dairy industry are supporting the Council work. This we feel should cause every member who is now supporting it to feel gratified that he is contributing to the work of an organization whose worth is recognized by all of those engaged in the dairy business and one which will continue to develop rapidly and establish its results upon the minds of the buying public in such a way that the dairy products market will be continuously satisfactory.

THE IOWA STATE DAIRY ASSOCIATION—ITS WORK

By E. S. Estel, State Dairy Expert

The annual report of the Iowa State Dairy Association has differed from year to year insofar as the demand for the different types of work has made it necessary. Those who were familiar with the early history of the Association will remember that its efforts were largely spent in carrying on propaganda work for the purpose of educating the Iowa farmer to the value of the dairy cow. This work is no longer necessary, however, and at the present time more of a definite personal touch has been necessary to assist those men starting in the dairy work.

During the past few years the dairy calf club work with the creameries and dairy interests of the state has proven very profitable and in increased demand. Dairy farmers have realized that they cannot longer continue with the original type of low producing cows found in the average community and there has been a strong demand for good dairy stock both in the form of calves and of mature cows. The calf club work was started around creameries or in sections where there is a good demand for milk and butterfat by the introduction of grade dairy heifers. These heifers were put in the hands of boys and girls, the banks taking their note similar to the organization of all forms of club work. These calves were carefully selected by competent judges in some of the dairy districts and have proven highly satisfactory. They are and have been in milk for a period of a year or more and are a decided improvement over the class of milk cows in the average section.

The first grade clubs were organized by the Association in 1917. At that time the work was new and it has been necessary since to make several changes in the rules and regulations which have governed the club members. We have found that wherever the interest locally was strong enough to give the proper amount of follow-up work, the clubs have maintained a strong interest on the part of the members as well as disinterested parties in the community. The first grade heifers secured were purchased at the ages of from 6 to 8 months old—when they are off of milk. Following this first year's work a change has been made and all of the calves have been purchased when from 3 to 6 weeks of age. They have at this age been bought more nearly worth the money, the owners can by proper feeding, develop them just as fast as they deem advisable, and there is not the danger of securing stunted calves. These younger calves are shipped in individual crates by express and can thus be purchased in any number.

Since 1917 the Association has distributed 1,482 high grade calves through the medium of the club organization. These calves have represented each of the four leading dairy breeds, the Guernsey, Holstein, Jersey and Ayrshire. The demand during the past two years, however, has been much heavier for the Holstein and Guernsey calves.

The grade clubs that have been organized thus far are as follows:

1917

Organized by	Location.	No. of Calves.
Farmers Savings bank	Barnes City	40
Central Savings Bank	What Cheer	42
First Savings Bank	Sutherland	61
Brighton State Bank	Brighton	45
Leavitt and Johnson Bank	Waterloo	189
First National Bank	New Sharon	28
Iowa Savings Bank	Wellman	65

1918

Farmers Co-operative Creamery	Britt	32
National Bank of Decorah	Decorah	169
Farmers Co-operative Creamery	Exira	34
Merchants National Bank	Grinnell	25
First National Bank	Iowa City	52
Farmers Co-operative Creamery	Klemme	38
Farmers Co-operative Creamery	Leland	46
All Banks Co-operating	Milford	64
Riceville Creamery Co.	Riceville	20
Saratoga Co-operative Creamery	Cresco	32
Supt. of Schools	Strawberry Point	22
Farmers Co-operative Creamery	Victor	10
Bank of Woden	Woden	28
Farmers Co-operative Creamery	Clear Lake	12

1919

Earlville Creamery Co.	Earlville	39
Perry Packing Co.	Perry	43
Farmers Co-operative Creamery	Templeton	13
Farmers Co-operative Creamery	Britt	17
Farmers Co-operative Creamery	Guthrie Center	61
Farmers Co-operative Creamery	West Bend	26
Farmers Co-operative Creamery	Worthington	27
Farmers Co-operative Creamery	Volga City	10
Gladbrook Creamery Co.	Gladbrook	16
Wadena Creamery Co.	Wadena	6

1920

Farmers Co-operative Creamery	Menlo	25
Farmers Co-operative Creamery	Manly	40
Farmers Co-operative Creamery	Ledyard	12
Consolidated School	Bode	17
Baird Creamery Co.	Lohrville	6
Kossuth Co. Farm Bureau	Titonka	25
Farmers Co-operative Creamery Co.	Ottosen	15
Winneshiek Co. Farm Bureau	Ossian	22
Audubon Co. Farm Bureau	Audubon	8

In 1919 the first club was organized in Iowa in which purebred heifers were used. Previous to this time all clubs had been organized with grade heifers with the idea in mind that in the future the time and place would be available for carrying the work a little farther by the use of registered heifers. It must be remembered at the start that Iowa is not primarily a dairy state and that there are only a few locations in which purebred heifers could be used and success be expected. Only those communities or counties where there are a number of pure-bred breeders or where the people are familiar with grade dairy cattle as well as somewhat of a general idea of the value of purebreds should be considered. Where at all possible all purebred clubs have been organized in counties in which there were purebred breeders' associations. With these organizations already in the county the calf club can be made a definite program or work for the organization.

Establishes New Breeders

There is no doubt but that calf club work is one of the surest and most effective ways available for the breed expansion or the establishment of new breeders. Because of this fact all but one of the eight purebred heifer clubs have been organized through the county breeders' associations. This makes every individual breeder responsible to a certain extent at least in keeping up the interest of the members and doing all in his power to encourage them. We have found that this co-operation goes a long way toward making for a successful club.

The financing of the clubs which in some of the earlier club work was more or less difficult, has been very easy to handle. There has not been a community in which the Association has attempted club work in which the bankers were not more than willing to co-operate to the extent of taking the boys' and girls' notes in payment for the calves.

Three Year Period Advocated

The time period or duration of the clubs has varied. The Dairy Association has taken the stand that the club covering a period of three years makes possible more definite and beneficial results than the short time clubs. Where the heifers are kept in the possession of one boy or girl or on one farm for a period of three years both the club member as well as the parents have an opportunity to realize the possibilities in the raising of purebred dairy cattle. If no hard luck is experienced at the end of the three year period there should be one or possibly two calves in addition to the original club heifer. Where the club is organized on a one-year basis such as has been the case in a great many states, we are of the opinion that the member has not received the real benefit which the club was organized to give. Unless bred heifers are used there will be no calves dropped during the one year the heifer is in the possession of the club member. The real possibilities in the breeding phase of the club have then been overlooked. The ideal arrangement and the one which the Dairy Association is encouraging is the three-year club with a show and annual get-together at the end of each year. This keeps the people of the community more closely in touch with the work and gives them an idea also of the results being accomplished.

Age of Calves

The age of the calves used in the club has always varied. The use of calves from 6 to 12 months of age has been advocated because we did not want to get clear away from the calf idea. The first important thing I believe, is to buy the calves at an age old enough so that they may be secured subject to the tuberculin test. Calves purchased at the age of from 6 to 10 months can still be considered calves and are still considered such by the boy and girl members. Two different clubs were organized in which bred heifers were used. From the standpoint of actual profit to the club member and from the quickness of the returns to be expected this is a more ideal arrangement but it is our belief that the club member does not get the personal interest in a yearling or two-year-old heifer that he or she would in a younger calf. In Wisconsin the club work is carried on and the majority of the calves selected when from 3 to 6 weeks of age. It is true that calves of this age can be bought at a much cheaper price and there is the advantage of the attachment the boy or girl gets for a younger calf but at the same time it is our belief that the risk run in not being able to buy them subject to tuberculin test is too great to be chanced.

Fayette County Club

The first purebred heifer club was organized in Fayette County in the spring of 1919. Fayette County is one of the leading counties from the standpoint of the number of Holstein breeders and they are an enthusiastic bunch. Their organization, through the work of the county agent, made this original club a pronounced success. Every breeder left the standing offer with all club members that he would be glad to furnish free services of his herd sire when the heifers came of breeding age. This interest of the breeders together with the mighty effective follow-up work kept the members hard at work on their calves.

The breeders considered that this club was more of an experiment and were not ready to take up the three-year idea. For that reason the wind-up of the club in the form of a show and sale was made one year later. The heifers were brought into the sale in exceptional condition. I rather doubt if any of our purebred sales can boast of cattle that were uniformly better fitted than this bunch of calf club heifers. In accordance with the plan of the club every member was to have the right of buying back his or her heifer in the sale by the mere payment of the amount of the note. The sale was an exceptional success, making an average of $610 per head which was an average increase of $460 over the purchase price. This sale price, however, is hardly a fair one since all but a few of the boys and girls availed themselves of the opportunity of repurchasing their heifers. Buyers, however, were present and their demand for the stuff made the youthful owners pay unexpected prices in order to retain their ownership. This club was a real success because first the calves got into the right kind of hands, were fed properly and given a chance to develop the way they should. They were all in calf to some of the very best herd sires in the state.

I have gone somewhat into detail on this club because I think that it illustrates the possibilities in the purebred heifer club work where they are properly organized and followed up and because it bears out the contention that the calf club establishes new breeders. In this club alone it is safe to say that the nucleus of at least six new herds was started.

1920 Clubs

In 1920 the work has further expanded and has brought an ever-increasing demand for this form of club work. The first club of the year was organized in Kossuth County with the Holstein and Guernsey Breeders Associations of that county. The county club leader and a representative of the Dairy Association purchased 24 head of Holstein and 7 head of Guernseys from Waukesha County, Wisconsin. Due to the fact that the breeders of the county had done so much Federal testing, these heifers were all bought subject to a 60-day retest.

Following the successful close of the first Fayette County club an increased demand was present for a second one and 16 heifers were distributed from Oelwein. The next club was organized at Dyersville in Dubuque County and is the first club organized up until this time which did not have a purebred breeders' association behind it. There was sufficient interest and enthusiasm, however, to warrant the organization of a club. Dyersville had for years been noted for its annual Dairy Day and they were of the opinion that this day could be further enlarged into something on the order of a county fair if there was some one project in which all were interested to build the fair around. It was decided that the purebred heifer club afforded just the interest needed for this purpose and consequently the first fair held during the month of September was built around the exhibit of purebred calf club heifers and was pronounced a decided success.

The Buchanan County Guernsey Breeders, although they were fewer in number than either the Holstein or Jersey, were not to be entirely outdone and organized a club of 7 members during the latter part of the summer.

The first Bremer County club was brought to a close at the time of the County Fair at Waverly in August. At this time a special calf club exhibit and show was made and a sale held on the last day. All of the original heifers and their calves were put through the ring. The sale, although coming at a rather slack time due to the closeness of money conditions, proved very successful. All of the cows and their calves which were sold made their owners a very satisfactory profit. Bremer county people are evidently strongly in favor of this type of club work, for a second club has recently been organized and approximately 15 head will soon be distributed to 15 more boys and girls.

The purebred clubs organized during 1919 and 1920 are as follows:

1919

Organized by	No. of Calves.	Breed.
Fayette County Farm Bureau	17	Holsteins
Buchanan Co. Jersey Breeders Assn	32	Jerseys
Buchanan Co. Holstein Breeders Assn	17	Holsteins
Bremer Co. Holstein Breeders Assn	24	Holsteins

1920

Organized by	No. of Calves.	Breed.
Kossuth Co. Farm Bureau	24	Holsteins
——	7	Guernseys
Fayette Co. Farm Bureau	15	Holsteins
Dubuque Co. Farm Bureau	12	Holsteins
——	1	Guernseys
Buchanan Co. Guernsey Breeders Assn	7	Guernseys
Bremer Co. Holstein Breeders Assn	15	Holsteins

Experience in the organization of calf clubs, of course, is gained with each succeeding club organized. The principle of the club work is fine and where properly organized, has worked out just as satisfactorily as they are expected to. There are of course, drawbacks toward making some clubs just the success they should be. The experience of the Association in the different clubs is that no association is just as satisfactory as it should be unless there is a club leader in the county or some one who can and will take sufficient time to give the work the proper amount of attention. The Fayette and Kossuth County clubs have been by far, more successful and this success is entirely due, I believe, to the fact that there is a club leader in the county who makes these clubs his specific duty.

A few of the other difficulties and drawbacks to the most successful operation of the club are poor care and feeding and allowing the heifers to run with the herd bulls and often getting in calf at too young an age. I think that the most of these difficulties can be gotten around by paying more attention to the farms from which the membership of the boys and girls is encouraged. The work proves more conclusively each year that the smaller clubs with calves placed in the right hands are of much more lasting benefit than the large clubs with calves placed without careful consideration of the kind of care they are likely to receive.

In the short time that the purebred heifer club work has been handled in Iowa a remarkable increase in the interest and enthusiasm has been noticed. Breeders are realizing that this type of work is one of the most effective ways of interesting people in the possibilities of the grade and purebred dairy cow. The demand for the clubs has been increased to such an extent that it has taxed the capacity of the Dairy Association in connection with the other routine work to handle the organization and the follow-up work effectively. I believe that the future of the dairy calf club work is very bright and the possibilities unlimited. There is not a community in the state in which sufficient breeders are located but where there is a sufficient interest and willingness to get behind the Dairy Association in organizing a club with calves of one of the dairy breeds.

TAKE CARE OF YOUR HOME MARKET

By A. M. Hein

You have learned a great deal of this industry that we represent since we have gathered at this convention. You no doubt have gathered enough pep by this time to go home and start something that will arouse your patrons so that they will sit up and take notice to what you have to say. You have learned that the time for Quality is at hand, they have picked me to tell you how to dispose of this butter with Quality to best advantage and realizing more money from same than heretofore.

Undoubtedly every creamery in Iowa has some kind of a home market for a part of the butter which it manufactures, regardless of the grade of butter which it may be. These creameries must also realize that butter disposed of on this home market nets more money. Many operators seldom figure off freight, nor do they take into consideration shrinkage, deterioration while in transit, and market conditions which effect the sale of goods on the eastern markets.

At the creamery the price, usually, is made according to market quotations from extras, one way or another. This is the price demanded from the home trade. The commission man sells our Iowa butter and the price is based on what the butter sells for. Very few creameries have a set price by which they will know just what to expect from the market, unless they turn out a uniform piece of goods the year around and these are few, I believe. Is it not better, then, and more profitable to sell as much butter on our home markets and make our own price and not take any chances on the butter while in transit, especially when it takes the length of time now required to get butter on the market from this part of the state?

This is one thing that our average co-operative creameries have overlooked in the past. Just because the bulk of butter made at these creameries is shipped to an eastern market, most creamerymen pay little attention to home trade. Apparently they feel that because they have the only creamery in town and because every store handles it, people who want creamery butter should know where to get it. So why should he worry about home trade?

Let me tell the creamerymen something worth while: Build up your home trade by making the best butter possible, something with Quality back of it, something that is in a class by itself, and you will then find the consuming public reaching out for this butter and willing to pay the price which you demand. There are hundreds of different brands sold, but there is only one brand in this state that accomplishes just what it was created for, and that is the State Brand. Our creamery has sold butter under this brand for about a year, and have given it a fair trial during that time. We realize 2c above New York extras, net our station, which is a good price for our State Brand Butter. We also carry a

No. 2 grade in stock at 5c lower. Ninety per cent of our patrons are getting 5c premium per pound fat on the sweet cream which they furnish during cool weather. Our biggest trouble has been to get sweet cream enough in warm weather to take care of the trade which we have established on this State Brand. The past three months we printed each month better than 10,000 pounds, most of it being State Brand. Trading has not fallen off one bit on the State Brand Butter, since prices have advanced but on the lower grade it has fallen off the same as usual this time of the year. The future outlook for a State Brand is so bright that I hardly know how I can express its worth to the creameries of Iowa.

I am very much surprised that in the last few years so few buttermakers have taken advantage of this great opportunity for their creameries. I cannot help but believe that some of them do not comprehend its meaning or they would have gone after it with heart and soul until they received permission to use the brand on the best butter which they manufacture.

Surely our creameries do not take the same attitude toward this brand as many farmers did toward thorough-bred stock some 15 or 20 years ago; if a man paid a hundred or two hundred dollars for a high-grade hog, at that time, his neighbors thought him crazy. The same was true with high-grade cattle having good records back of them. They called it "humbug" in those days. When the hand separator first came into use and was getting a good start in this country and buttermakers were aware of the fact that these machines were ruining the quality of our butter, some of them could see it no other way but that the separator had to go to the junk pile and our creameries return to the whole milk system. Instead of the system of handling this product changing, it was some of the buttermakers who changed their occupation, and the rest have changed their minds. Let's get back to 1920. And what do we find? In nearly every community will be found farmers who specialize in some kind of high-grade stock. These men have all learned there is something in pedigreed stock or we would not have men that pay from $10,000 to $40,000 for one hog or other animal.

As I have said before, we have in this state a Butter Mark or Brand, if you wish. Butter under this Brand must have a high record. Quality is the foundation. The goods manufactured and sold under this name protects the producer, the manufacturer and the consumer. On every package is displayed the pedigree which goes to show its superiority.

The consuming public grasps the idea, then why not the creameries? It can be had only through you and me, and with the aid of the State.

If there is any creameryman who receives inferior cream at his creamery and who is not making plans to do something to improve this condition, he and his creamery will some day be fighting between life and death, while his patrons will look to him to remedy the situation—after it is too late. Grade and pay accordingly, and refuse a low grade of cream entirely is the only help that will save him. Our creamery sent out notices to our patrons soon after the market began to look gloomy on low grade butter that we would reject No. 3 grade cream from the first of November. The result was that we got a good share of it sweet since. Poor cream is due to neglect on the patrons' part at this time of year, due to the fact that most cows are about dry at this time and little attention is given to small batches.

Some buttermakers who are grading and make more than one grade, are disposing of their poor butter on the home market. This is a mistake. You cannot build up a sound thrifty market for your trade unless you give them the best and if some prefer the cheaper grade the price should be accordingly. If it takes a shipment of butter two or three weeks to reach the eastern market, even the best grades will deteriorate considerably. If this could be sold on a home market or some near-by town, the consuming public would get a direct benefit out of this good butter, which would otherwise be lost, and this is where the extra money can be asked for. Work up a sound home trade and you will never regret it.

PART VII

Corn Belt Meat Producers' Association

Seventeenth Annual Meeting

DES MOINES, IOWA
TUESDAY, DECEMBER 14, 1920

MORNING SESSION

President Sykes: Gentlemen of the convention, the time has arrived for the calling to order of our seventeenth annual meeting, and we welcome you here with us. We will now open our proceedings by invocation, to be offered by Dr. W. P. McCormick, of the United Presbyterian Church, of Cottage Grove Avenue.

Prayer by Dr. McCormick, of United Presbyterian Church.

President Sykes then delivered his address, as follows:

PRESIDENT'S ANNUAL ADDRESS

To the Friends and Members of the Corn Belt Meat Producers' Association: You have assembled in this, your seventeenth annual gathering for the purpose of considering the vital problems which now imperil the very existence of agriculture and live stock production.

Since your last annual meeting, some ten months ago, the business of agriculture and live stock production in the corn belt has been and is now passing thru the most crucial period in its history. It has been singed and scorched, beaten, bruised and maltreated, but it still survives and remains the most vital and essential of all industries. In this short period of time, corn has sold for over $2 per bushel in the Chicago market, and has now declined to 70 cents; wheat declined from $3.25 to $1.50, and oats from $1.25 to 50 cents per bushel. Live hogs have radiated in price between $9 and $18 per hundredweight, and cattle have percolated between $4 and $19, and so on. We might continue our enumeration, but it is useless and unnecessary, as all are familiar with the facts and the staggering blows that have been dealt our industry by a combination of forces which have succeeded in completely unstabilizing and demoralizing our markets.

There is no other great business industry that could possibly survive such terrific onslaughts upon the prices of its products without becoming bankrupt; but the farmers and stockmen still remain true to their trust, and the morale of the agricultural classes is yet unbroken; but I wish to serve public notice upon all who are concerned in the buying, selling, handling and consumption of agricultural products that there comes a time when forebearance ceases to be a virtue, and that there is a time coming in the not far distant future, if market conditions are not speedily improved, that the long-suffering farmer will strike back, and that very hard.

The consuming public and some harebrained editors of big city dailies may talk and discourse upon it being the sacred duty of the farmer to produce food to prevent the world from starving, but I want to say to all that it is no more the sacred duty of the farmer and stockman to continue to produce food at such great loss in order to prevent the world from suffering for food than it is the sacred duty of the coal miner and the coal barons to produce an unlimited amount of coal at a loss so that the world may not suffer for fuel. The sacred duty of the farmer is to himself and his family, and if the world is not willing to allow him the cost of production plus a reasonable profit for his products, then it is high time for him to arrange systematically to reduce his production. The farmers and their families have labored, sweat and sacrificed, working early and late and paying wages beyond all reason to hired help to produce a crop, believing that they would be remunerated by a just and equitable price for their products, and now they are informed that they have over-produced and must sell their wares for fifty cents on the dollar. This is indeed a sad commentary on our American civilization and much boasted system of marketing, and it is a condition which the farmers must take note of and deliberately set about to correct thru their various organizations.

As to the work and activities of your association the past ten months, I will say that these have been varied and important, as we have been passing thru the most crucial period as farmers and stockmen in our history, and your officers have been constantly engaged in various efforts to relieve the very oppressive and discouraging conditions.

At the time of the holding of your last annual meeting, packer legislation, as it is commonly termed, was receiving considerable attention by the congress at Washington, and your board of directors authorized the sending of a committee to Washington to assist, if possible, in securing some practical legislation for governmental supervision of the various agencies connected with the handling and slaughtering of live stock.

It so happened that when a call was received for your committee to come to Washington, that only two of the members of the committee could leave home, so accordingly Mr. A. L. Ames and I went and in due time appeared before the house committee on agriculture, which was then considering the formation of some sort of legislation. The hearings were long and tedious, and much time was wasted and a voluminous amount of testimony submitted by the packers that had no bearing whatever on the case. Your representatives remained some ten or twelve days, and then turned the work over to other live stock interests to look after and returned home. The hearings continued for some five or six weeks, and I am very sorry to say to you that while a bill has been prepared by both houses of congress, no action whatever could be secured on either bill before congress adjourned last summer, but the Kenyon-Kendrick bill remained in the senate as unfinished business and will be called up for consideration at the present session of congress.

Then there was the all-important question of stock cars and railroad service during the first six months of the year, which was ever present with us and demanded the constant attention of your officers, and it was under the greatest difficulties that we succeeded in co-operation with the officials of the various railroads to get anything like an adequate supply of cars for the shippers.

During the winter and early spring conditions became quite serious. They were alarming, and if it hadn't been for the efforts that were put forth by the officers of this organization, who were in constant touch not only with the operating departments of these various railroads, but also with the Interstate Commerce Commission, and the chairmen of these important committees in Washington, why I wouldn't attempt to say what the situation would have developed into. But we know that it was bad enough in spite of everything that was done, and all of the various interests that were working in behalf of the shippers to realize these very serious conditions that prevailed.

Your president made two trips to Washington, D. C., for the specific purpose of securing relief for the shippers, and on one of these he appealed both to the Interstate Commerce Commission and the senate and house committees on interstate and foreign commerce. He appeared in person before all of these important bodies and laid before them the dire need for proper transportation facilities for the farmers and stockmen of the middle-west, and a second hearing was held before the senate committee, of which Senator Cummins is chairman. At this meeting, Senator Cummins not only called together his senate committee but he called in the presidents and operating heads of the various big railroads of the east and the middle-west, and I was asked to address the joint meeting, which I did, and explained to those present the whole situation and the urgent need for quick and speedy relief.

These meetings were held early in May, and I am glad to say, as you all know, they brought relief very quickly from a most harassing and unsatisfactory situation.

I have received a number of very complimentary letters from men over the state, as well as from men who have told me personally about their appreciation of the work done by this organization in assisting them in securing cars and service for their shipments.

In spite of our efforts, I want to say that we sustained a heavy loss—the cattle feeders and hog men. I am not speaking now with regard to the market, but on account of having to hold our fed stock so much longer than, in many instances, we should have held it. It meant an additional loss to meat producers of the country.

In this connection, I think it proper to call attention to the fact that during federal control of the railroads there was a general breaking down of the morale of the men employed on the roads, and as a result of this condition many strikes and disturbances occurred in the early part of the season, which greatly added to a most serious situation and made it much more difficult for the roads to move the traffic, so that in our criticism of the railroads for their inefficiency, it is well to bear this in mind.

As there has been so much written, said and printed in regard to the recent advance of 35 per cent in freight rates, I hardly think it necessary to go into the subject at any length. Suffice it to say that your association made a most tremendous effort to hold down the valuation of the railroad properties upon which the 6 per cent must be paid. Your attorney was at Washington, D. C., during the entire trial of the case, and your president was there for some considerable time, and testified before the commission, placing the serious condition of the live stock industry squarely before that tribunal and making a strong plea for special consideration of the industry. While we did not accomplish for the farmers and stockmen all we had hoped to accomplish in the case, we succeeded in cutting down the valuation placed upon the properties about one and one-half million dollars, thus reducing the advances that would have been necessary about 10 per cent, and saving to the Iowa producers a million dollars a year.

Conditions confronting the agricultural and live stock industry are most distressing and deplorable. On account of recent advances in freight rates, yardage and commission charges, it now costs from $1.50 to $2 per head to market your hogs and from $6 to $7 per head to market your cattle. It also costs about 20 cents per bushel to market your corn and 12 cents to market your oats. With the present low prices that prevail, if this condition continues for any great length of time half of the farmers and stockmen will go broke, as it is utterly impossible for them to stem the tide of reverses and continue in business.

The prices of the things you must buy, such as farm implements, lumber, groceries, coal and clothing, have been but slightly reduced if reduced at all, while your products have declined from 100 to 150 per cent in value. This unparalleled condition of affairs can not continue. The farmers should confine their buying to absolute necessities, repair their old implements and machinery, and get along with what they have and refuse to buy until prices are materially reduced. Do the same thing with your buildings and sheds, with your wearing apparel, and all else, and refuse to buy, and you will find that prices on manufactured products will come down as well as those on agricultural products; but unless you do this, they will continue to bleed you as long as you will buy their goods.

The very unusual conditions affecting agricultural and live stock products that have prevailed during the past season have imposed upon your officers tremendous burdens. Conferences and meetings of various sorts have been the order of the day. Scarcely a week has passed that they have not been called in conference on matters directly affecting your interests, and some weeks we have attended two or three of these meetings; and while the outward results have not been as visible as we hoped for, we believe much good has been accomplished, and that plans and movements have been formulated and set in motion that will eventually work out for your good.

We have also been able to secure local benefits, such as improved stock yards conditions, securing cars, and many such like benefits for our members. One of the most recent benefits secured for the live stock producers and shippers who patronize the Chicago market was to secure a reduction of 25 cents per bushel in the price of corn fed at the Union Stock Yards. This was brought about by your president, Mr. Hunt, of the Iowa Farm Bureau Federation, and Mr. Harlan, your Chicago representative, appearing before the stock yards officials and protesting against the prices charged, and urging a reduction, which they secured. This means a saving of perhaps from $500 to $700 per day to those who ship to the Chicago market.

The question of the collection of damage claims against the railroads is one which gives our membership much worry and concern, and many of them have not yet learned that Mr. Owen Coon, located in the Transportation Building, in Chicago, is associated with your organization as claim collector, and that he will give your claims prompt and careful attention if you will file them with him.

In connection with the question of claims, I wish to incorporate into my annual address a list of pointers on railroad claims, as submitted to me by Mr. Coon, our claim attorney at Chicago:

"Pointers" on Railroad Claims.

"1. Claims must be filed within a certain time limit or they are outlawed. This time limit is usually six months, but it can be less. File your claim as soon as it arises and play safe.

"2. Claims are outlawed unless they are sued within two years from date of delivery of the shipment. The exceptions to this rule it is best for the shipper to forget. Sue as soon as your claim is declined, if it is good.

"3. You have a good claim for (a) extra feed, (b) shrink, (c) any decline in selling price during delay. A delay of one day on a live stock shipment makes a good claim. As far as possible, keep a record of the home weights to know your approximate shrink.

"4. You have a good claim for all animals lost in transit. Count your animals after they are loaded. Have an assistant also count them, so that he can serve as a witness, if necessary, that the number of animals claimed to have been loaded were actually loaded.

"5. You have a good claim for all animals killed in transit, if the shipment was delayed, or the railroad can be shown negligent.

"6. Don't be afraid to sue upon your claims. Many a good claim is never settled until after it is sued. Suing a railroad is nothing, and costs little compared to the money usually obtained from doing it on good claims.

"7. If a caretaker accompanies the stock, have him keep notes in writing as to places where car is delayed or roughly handled, and also names of witnesses on the same train. If animals are lost or killed, you must be able to show where and how such happened. You can't recover unless you can produce some evidence on these points. This applies only where a caretaker accompanies the shipment.

"8. Unless you have had a lot of experience in handling railroad claims, don't think of filing the claim yourself. The chances are that you will fail, and will get the matter tied up in such shape that no one can help you later. Place in the hands of someone, regardless of who he may be, who makes a specialty of this work.

"9. Live stock commission men are now turning claims over to outside parties to be filed, without the consent and authority of the shipper. Some of these parties are not reputable and honest, and others are not efficient, and take six months and longer to get results. Many claims are now filed without any knowledge on the part of the shipper at all. Play safe on this matter. Instruct your commission man not to file a claim until you so instruct him. Instruct him to return the account sales to you, and you can then select whatever agent you desire to handle the matter for you, and pick out the best and most efficient.

"10. If other parties are allowed to file the claim for you with your consent, you can not later select another. The party with whom the claim is first filed has the authority to handle it to the end. So select your agent to handle the claim with care.

"11. Never allow any outside party to handle a claim for you except on the understanding that the voucher in settlement is to be taken to your order, and sent to you with a separate check from you later to cover the collection charge. Then, if there is a compromise, you know that you received every cent that was paid. If the voucher from the railroad is taken to the order of the person handling the claim and cashed by him, and the proceeds sent to you by his personal check, you have no way of knowing whether you received all that was paid by the railroad. Play safe.

"12. For us to handle your claim, simply send (a) the account sales and (b) a copy of the live stock contract that can be obtained from your local railroad agent. We will make up the claim for you and obtain whatever other information is necessary without trouble to you. Claims should be sent to Owen L. Coon, Railroad Claim Attorney, Transportation Building, Chicago, Illinois."

Work of Representative at Union Stock Yards.

As most of you are aware, at the holding of your last annual meeting it was definitely decided to place a representative of this association in the Union Stock Yards at Chicago. In this we also secured the co-operation and assistance of the Iowa Farm Bureau Federation and Mr. C. L. Harlan was employed and located at the Chicago markets to represent both organizations, about March 1.

Concerning the important work which Mr. Harlan has been doing, I am not going into detail, as he has a very interesting report of his work to submit to you later on, but will state for your information that this is the first organization to place a statistician in any of the big terminal markets to secure definite information and data concerning the marketing of live stock in the corn belt, and I consider the statistical data and information which Mr. Harlan has compiled of the greatest value to the live stock producers of this territory, and believe that plans are now in the process of formation that will tend to place the business of feeding live stock on a much sounder and more profitable basis.

Now as to the condition of your association, we consider it healthy and vigorous. It never was as easy to secure renewals or new members as during the past season, and wherever we were able to get into a community or county, the memberships were substantially increased; but my field work was very materially reduced on account of many other important matters that were forced upon me, and as a result your organization suffered on account of not having a number of solicitors in the field increasing your memberships. In the opening of the season, we had promise of some very efficient help from a member of your board of directors, but later on a shortage of help to take care of his own farming operations developed, also sickness came in the home and finally he himself became incapacitated for the work, leaving us without any assistance whatever in the work, which very greatly militated against the splendid increase in membership which we had confidently hoped for during the year. However, I think that the reports of your secretary and treasurer will show a very gratifying situation and will denote a good, healthy condition.

In closing, I wish to say that I have had the fullest co-operation not only from the officers but from the members in the various localities where I have worked, and to all these I want to express my most hearty appreciation of their helpfulness and to thank one and all for their very loyal support, and to thank Wallaces' Farmer and the Daily Drovers' Journal, of Chicago, and all other weekly or daily periodicals that have given such full and free publicity to our work and in this way contributed to the upbuilding of your organization. We want, in this public way, to express our thanks to you and to assure you that we will always appreciate your hearty co-operation.

And finally let me say to you that your organization is looked upon as a permanent fixture and that the sentiment prevails that there is an urgent need for the continuation and strengthening of your association, and its functions and activities should be directed along the most helpful lines in the future, to protect and encourage the live stock producers of the corn belt.

Mr. Thompson: Mr. Chairman, I should like to just interrupt the proceedings of the Corn Belt Meat Producers' Association a moment by asking one question to clear up a matter. Do you consider the excuse of a railroad that stuff was delivered at the terminal, that that excuses them from liability as to paying the claim, when it was turned over to the terminal—I might occupy a few more seconds in explaining: The stuff was delivered at the terminal at 5 o'clock in the morning, and it arrived at the yards too late to be sold, and they refused to pay the claim, saying that they aren't liable for anything because it was turned over to the terminal.

The President: I would like for Mr. Coon to answer that question. I think he is better prepared to answer it than I am.

Mr. Coon: My opinion is it would still be upon them. They are liable for the loss. Their liability still continues until they have actually delivered the stock. They wouldn't have a real delivery until the stock was placed at the unloading chutes to be unloaded. My opinion is that the liability of the railroad would still continue until the stock is unloaded, because they have not effected a delivery. It is not a final delivery of the stock when it is placed for the terminal. It is not really delivered until it is placed at the chutes.

Mr. Thompson: This stock was delivered to the terminal at about 5 o'clock, and it didn't arrive at the chutes until about 2 o'clock.

Mr. Coon: You should realize that the freight claim department is really the buffer of the legal department.

The President: The next we have is the report of the secretary-treasurer, Mr. Goodenow.

Mr. Goodenow: First I will read to you the secretary's report:

SECRETARY'S REPORT, 1920.

Receipts for the year		$11,310.12
Disbursements—		
Bank collection fees	$ 47.35	
Refunds to county associations	199.50	
Directors' expense	475.73	
Expenses of delegates to Washington, Chicago, etc.	366.53	
Stamps, printing, stationery, etc.	1,499.54	
Bond for secretary and treasurer	20.00	
Annual meeting	259.87	
Refund, over-payment of dues, check	7.00	
Clarence Pickard	60.35	
President's salary and expenses	3,235.78	
Clifford Thorne, legal services	1,720.80	
C. L. Harlan, salary and expenses	2,167.12	
Secretary's office	500.00	
Total		9,559.57
Balance on year's business		$ 1,750.55

Now I will read the treasurer's report:

TREASURER'S REPORT.

Dec. 27, 1920—Balance on hand		$ 6,287.36
Jan. 9, 1920—1919 dues collected by Chas. Goodenow	$ 89.00	
May 12, 1920—Received from Secretary	1,436.97	
Corn Belt dues collected	9,125.80	
		11,351.77
Disbursements		$10,662.25
Balance on hand		$ 6,976.88

Mr. Goodenow: Now, this report does not agree exactly with the secretary's report, because the books were balanced at two separate times, and I have a small portion of last year's business—in fact, there were two orders amounting to $450.03 which were unpaid at this time, and also $89 that the secretary shows that wasn't on the books, and that makes the variation in the amount. So that I have on hand at this time $6,976.88.

The President: If there are any questions you would like to ask Mr. Goodenow concerning this report, why, of course we want everybody to feel free to inquire. If there is anything in your mind that is not clear, we want to clear it up if we can concerning this financial report. If not, we will excuse Mr. Goodenow.

Is the auditing committee ready to report at this time?

Mr. Cessna: Your auditing committee has examined the books of the secretary and treasurer and find them to be correct. Signed by Mr. Baird, of North English; D. W. Mott, of Hampton, and T. C. Cessna.

The President: Now, gentlemen, you have heard the report of the secretary and treasurer. Now, in order that you may more clearly understand that there was only one report given this year instead of two, possibly I had better explain it in just a few words. Mr. Wallace up until this last year, as you know, has taken care of collections in the secretary's office. That work was done by his daughter, and like most young ladies she decided to get married, and last spring she was married. After that Mr. Wallace was rather at sea as to just how he was going to take care of that work. He couldn't give his personal attention to it, and it was very difficult to employ competent girls that he could trust, and so he finally entered into an agreement, with the consent of the executive committee, to turn this work over to Mr. Goodenow, who was treasurer—that is, the collection of funds, the finances. That is the reason that Mr. Wallace has not made a report to you this year, as he has in the past. This work was turned over to Mr. Goodenow about the first of June or, possibly, during the month of May sometime, and he has made the entire report for the association as both secretary and treasurer.

Now, you have heard and listened to these reports—the reports of Mr. Goodenow as secretary-treasurer, and the report of the auditing committee. What do you wish to do with the reports?

Mr. Corey: I move that the reports be adopted and placed on file.

Motion seconded and unanimously adopted.

The President: We will now proceed with our program. I am sorry to announce to this congregation of men today that a man that we had hoped to have with us, and a man who you all know and have mingled with, and has been before you frequently, and in whom we all have the greatest confidence, and in his distress, sympathy, has been deprived by sickness of being here—that is, Prof. J. M. Evvard. Professor Kildee's name appears here, but it is an error; it should be J. M. Evvard, for it was he who was to talk to you at this time on the cattle situation. Professor Evvard is now in the hospital at Iowa City, and in a pretty serious condition, they say. That is, it is not critical, but he will have to undergo another operation there, and I am very sorry that he can not be with us today, but am glad that we have his very able assistant, Professor Culbertson, to whom Professor Evvard has delivered his paper, and at this time we are going to listen to Professor Evvard's paper read by his assistant, Professor Culbertson.

Professor Culbertson, Ames, Iowa: Mr. President and Members of the Corn Belt Meat Producers' Association: I have been asked to read this paper by Prof. J. M. Evvard, of the Iowa Experiment Station. I only got this paper about 9:30 this morning, and since it is written in longhand with a lead pencil, and evidently written quite hurriedly, I know you will overlook any stumbling or hesitation I may show in the reading.

CATTLE FEEDING PROBLEMS.

By John M. Evvard.

My heart is saddened with the disappointment that comes in not being allowed by my physicians and surgeons to spend these two days, December 14 and 15, with you. Their word is law; I obey their injunctions.

It so happens that I am in the Mercy Hospital, at the home of the university of which we may well be proud. The University of Iowa, a sister institution to that at Ames, is doing splendid work. Here is located one of the greatest medical colleges on the American continent—yes, in the world. It is in the service of Doctor Dean and his associates of the eye, ear, nose and throat department, that I now am. Doctor Dean heads the medical college work in the university. This college does some most wonderful work in surgery and in medicine.

Hundreds of men, women and children from all over the state are here, taking advantage of the opportunities offered. In accurate diagnosis, as well as in effective treatment, the faculty here are gaining much renown, the reputation of the leaders in the various lines of work having gained tremendously in the past ten years. It is unfortunate that there are so many of us that do not really know that we have such a "Health Mecca" of our own within our homeland state of Iowa.

The Mayos of Rochester (I need not mention the state) have a nationwide reputation for good medical work. We of Iowa have our own "Mayos" right at home, and the sooner and the more fully we all appreciate this, the better will be the health and the greater the longevity of our Iowa people.

Naturally, as farming folks, our eyes have been largely centered upon Ames, with the progressive colleges of agriculture, engineering, home economics, veterinary science, industrial science and graduate work, and with its forward-looking experiment stations and extension division. This is fine, and but natural. But we must all recall continuously that we live in a commonwealth of people having varied interests, and that man lives not by agriculture nor home economics alone, but he lives in a wider circle, a circle of many sectors, all important. We should not, must not, neglect the law sector, the engineering sector, the child-welfare sector, the commerce sector, the art sector, and above all the health and medical sectors, if we would live out full and well rounded lives.

Years ago, when these institutions of ours were founded, the one at Ames and the other at Iowa City, if our forefathers could have discerned the future with unerring vision, might it not be that today, instead of having a geographical separation of common interests, we would be blessed with a congregation of all state-wide educational interests at a common place, one location, where, in homage to the future, we would be developing, with all factions working on a unified program, to the end that there be in this state one of the greatest universities of learning and achievement in the nation? But these are dreams, dreams of what might have been; so let us hasten to deal with the realities of the present and the prospective developments ahead.

"Cattle Feeding Problems" is an all-significant topic these trying days. We have problems galore, real, live, pressing problems that call for real thought and real action. Parlor discussions and parlor thinking have their advantages, but we must translate our thoughts into practical deeds if we would accomplish our ends.

Our problems as cattle feeders, in truth as meat producers in general, may well be differentiated on the basis of the individual, and of the group of individuals. Those problems with which we are each separately concerned may be classed as "individualistic," whereas those that involve the working of individuals as a group, in a common purpose, may be classed as "co-operative."

We have therefore two great avenues or sectors (really inseparable hemispheres) ahead of us in the working out of our hopes and our ambitions—the individualistic and the co-operative. There are a good many problems, which at best are problems of the individual specifically concerned, and for him, and him alone, to solve; but there are other problems—some of them of a stupendous, tremendous nature—that call forth the best collective and group instincts of all of us. For their successful solution we must get together and above all stick together; and then work steadfastly in the common purpose, for a common ideal.

The world moves steadily and conditions are ever changing. Evolution is the written fact of the universe. We as individuals must realize this and take advantage of the conditions of nowadays by altering our time-honored customs and traditions to meet the new issues.

From the cradle we have been steeped and stewed in the dictum that "competition is the life of trade," and that "God helps those that help themselves." As farmers, as cattle feeders, as meat producers, we, all of us, have gone, in major portion our "own sweet ways." In the meantime, powerful interests the country over have joined competitive hands, and capital, and brains, to thus better accomplish their motives. Individuals in different, respective, but common lines of endeavor, have organized, worked together, in short, subjugated themselves in a large measure for the success of the whole. Witness the labor unions, the steel interests, the packers, the wholesale grocers, and other organized efforts.

Happily, we are witnessing the development of effective organizations of farm and live stock interests, which gives us faith and encouragement to go on, and on, doing the best we can, working together, realizing that in union there is manifested a definite kind of strength worth while, a strength that is necessary.

A number of years ago one of my teachers impressed forcibly upon me this matter-of-fact proposition: "To paddle one's own canoe is human; to cooperate, divine." Independence of spirit and action means much to us Americans, but of late we have come to more clearly realize that we can help ourselves more by helping each other more. This, in other words, means, do the divine thing—co-operate!

In co-operation, we must learn to so conduct ourselves that others will be glad to work with us, and then we must work as harmoniously as we can with our co-operators. And when we decide to form a co-operative association, we must be prepared in spirit and in action to sacrifice a good many of our personal notions to the majority interest. In truth, we, in co-operation, pay out a certain percentage in order to get a larger percentage in return. We give up some things to get others more desirable in the future.

In forming and executing a co-operative society, we must first decide whether or not we are willing to pay the price for the prospective advantage sought. If the goal is, in the individual's opinion, not worth the cost, then the prospects for true co-operation are still "on the rocks."

Let us discuss briefly some of our individualistic problems as cattle feeders and meat producers before taking up our "co-operative" problems. I take it that in the future our biggest co-operative ventures will be along the lines of financing, buying, selling and transportation, with some emphasis placed on the securing of deserved recognition and protection, political and social.

Individualistic progress lies mostly along the lines of specific personal actions as contrasted to those co-operative ones which are done in the collective sense. Even with co-operative buying and selling organizations established, the individual feeder must in major manner decide what to buy and when to buy, so that his home production unit, the farm, will work most efficiently. He must also decide in large measure how long to feed and how fat to make his stock, and also when to feed.

The co-operative movement in buying and selling ventures should really aim to control and do those things which are most difficultly or impossibly done by the individual, the general aim being to give to individuals as much freedom of action as possible—said freedom to be consistent with the success of the co-operative enterprise.

In home production problems, the individual reigns supreme. There is plenty of opportunity between markets for him to exercise and capitalize his talents. Some problems in home production are:

1. Shall we raise our own feeders? Hardly! We, of the corn-lands country, can not compete with economic success with the cheap western ranges. Our Ames investigations have shown that calves could be bought on the market at a lesser figure than the raising cost. The pure-bred man must, of course, raise his own calves, but he has no choice. The feeder doesn't have to. Furthermore, the feeders may not want calves, being steer men. If we have considerable rough, cheap pasture land on our farms, it is generally better practice to buy most of our calves or older cattle, and not breed them. If the owner likes to milk, well enough—he may find the dual-purpose Shorthorn business—combined milk and baby beef—to his liking under such conditions; but even then he must be sure of his grain land for silage and for concentrates in feeding.

2. How about the silo? The silo has come to stay. Iowa is not a good hay state just now; hence we must depend on the corn plant for roughage as well as grain. The cattle feeder will find the silo a good investment, providing, of course, that he feeds enough cattle to justify the investment, and further providing that he can enlist the community in the project, so that a ring for owning the silo-filling machinery, and

for conducting the filling process, may be economically arranged. The single silo within a circle of two or three miles is working under an economic handicap. He who lives in the alfalfa districts of western Iowa has less need for a silo than the one who farms in central or eastern Iowa.

3. Shall we feed specialty or commercially mixed feeds? Generally speaking, our advice, based on experimental experience, is to stick tight to and stay with these principal and standard feeds in cattle feeding: Corn grain, corn silage, clover hay, alfalfa hay, mixed hay, soy bean hay, linseed oil meal of high grade, cottonseed meal (over 38 per cent protein, better 40 to 43), cereal straws (preferably oats), corn stover, corn fodder and salt. Sorghum and Sudan grass hays are in order some years. Oats grain is all right in a degree when it can be purchased for about 70 to 80 per cent of the price of corn per hundred pounds. The standard supplements are linseed oil meal and cottonseed oil meal—the preference being for the former at the same price. These supplements furnish what Iowa cattle feeders need; they are standard, and have a free and open market, hence are likely to represent true economic value.

In two years' results; the specialty feeds sold under trade names, such as Tarkio, Champion, Golden Rule, Alfal-Fat, CJMCO, "Alf'-Nol" feed, did not prove worth the money when compared with current values of standard farm feeds supplemented with linseed oil meal. One feed cost $47.70 per ton, but it was actually worth only $27.48. Another feed cost $57.40, but it was worth $14.10. Still another cost $51.10, and was worth 51 cents. Yet another cost $44.50, and was fed at a heavy loss—a loss so great that the manufacturer would have had to pay us $60.36 a ton to feed it as he directed, if we would have played even.

We must emphasize in passing that the specialty feed manufacturers entering feeds in our tests so far did not feed their feeds to the best advantage. Hence some of the feeds showed up rather poorly. However, the fact remains that the Iowa cattle feeder will do well to think twice—yea, thrice—before investing in specialty mixed feeds to replace his corn.

During the last two or three years it has been necessary for the feed manufacturer to add approximately eight to twelve dollars' margin per ton over and above the cost of the ingredients to cover cost of grinding, mixing, overhead, administration, licenses, bags and so on. In addition, the purchaser added the freight to this margin.

With your and your neighbors' corn cribs bulging, go easy before shipping in corn substitutes. However, a bargain is always a bargain, and he who picks up one is fortunate. Nevertheless, it is wise to know when a supposed bargain is a real bargain.

We hope to continue this specialty feed work again soon.

4. Shall we limit the grain ration? This is a big question, and is subject to all sorts of conditions. Older cattle, like two and three and four-year-olds, when fed on unlimited silage, with two to four pounds of linseed or cottonseed oil meal, and a minimum of hay or straw, do very well on little or no corn—say from none up to half a peck a day. For winter feeding they make gains upwards of two pounds usually, and

oftentimes three pounds for from ninety to a hundred and fifty days, and if started as choice feeders dress out around 57 to 61 per cent. If full fed on grain, they dress from 1 to 3 per cent higher. In two years of Ames results, the limited rations were winners. However, had these cattle been sold in June or July instead of April and May, the table may have turned, because there then is invariably a wider spread between "good" and "not quite so good" cattle—oftentimes more than enough to justify the heavier feeding. I believe, however, that there is less risk involved in feeding the lighter grain ration with silage. The Pennsylvania station has found limited grain feeding best in finishing for the Pittsburgh market. The spread in that market is less than at Chicago, and not sufficient for the higher finish to pay for the extra grain.

Why not feed lighter grain and heavy silage the first sixty to ninety days; then, if the cattle markets shows a sufficient tendency to pay large enough premium for extra fat, to go ahead and put corn to the cattle. This is a feasible plan, and will bear trial.

But the feeder must keep his "ear to the ground," and his "eye peeled," so as to forecast in as nearly a correct manner as possible. However, at best, forecasting the market now involves a very large element of "guess," which, in sad but wiser remembrance, is labeled "b' guess and b' gosh!"

If one feeds no silage, then it appears that the limited grain ration is a disappointment. The hay ration, even with alfalfa or clover, needs to be well fortified with grain.

5. What do figures show for winter feeding in 1918-19 and 1919-1920? They show losses for both years. Survey figures gathered by the Iowa State College, co-operating with the United States Department of Agriculture, indicate that the losses for 1918-19 in western Iowa were about nine dollars per head, and in 1919-20 ten dollars per head. Even at that, about one out of three made money, while two out of three, or twice as many, lost money. We believe these figures are somewhat indicative, also somewhat low, of corn belt conditions generally. However, we believe that cattle losses generally were heavier in 1919-20 than the year previous.

6. What about the future of cattle feeding this year? That depends on where you bought your feeders. If you bought them before the big drop which began the "bump the bumps" in November, and paid 9 and 10 cents for 900-pound feeders, which in December could be bought for a few cents less, then I would say that the December buyers appear the wiser. Perhaps some would say that the December buyers were less foolish, but, under our present handicaps as regards lack of data, lack of organization to forecast supply, lack of co-operation to prevent market overruns and gluts, who can say when any cattle feeder is wise or foolish—until he finishes his operation. Even then it's not so much a question of "wiseness" or "foolishness" as it is of good, old-fashioned luck, helped, perhaps, in a great many instances by a few barrels of good, old horse-sense that either increased the good luck or decreased the hard luck.

We must not forget that we have just been in—I hope thru—one of the greatest slumps—yes, the greatest absolute slump—the Chicago cattle market has ever experienced. This saddens men's hearts, and makes the air doubly gloomy. It is time to be optimistic, the time to see a beckoning light in the dark ahead. It is a wrong time to get shaky, nervous, lose control, and, like a pessimist, blow out the beckoning light of the optimist.

Not nearly so many cattle went to the feed lots this fall as usual. Only about two-thirds as many went from Omaha, and they were lighter than usual, due to the severe previous winter. In August, September and October about 80 per cent as many cattle as usual went from all markets into the corn belt. About 66 per cent as many sheep went on feed in the mid-west, altho the Colorado feed lots are pretty well replenished. It appears, however, that there will be much less meat made in the corn belt than usual, and this argues for a better future.

However, the question of employment is a big factor from the consumer's standpoint. Things are looking rather dark in New England, with the depression prevailing in the textile, shoe and other industries. The automobile centers are at low ebb. All these things mean that the average consumer may not eat liberally of meat, especially beef, as we in the west would like to see him, and this simply because he hasn't the wherewithal to purchase as freely as before.

The fatter heavy cattle may possibly be in good demand, but it does not take many of such sort to topple that market clear over and drive it down to the level of the medium stuff, so there is danger ahead that way. Usually the trade that gets this prime stuff is well able to buy, but the trade is very limited, and an oversupply even tho slight raises havoc with the price. One very shrewd market observer, an old-timer, told me that it was mighty poor policy for cattle feeders to overfeed for the fancy prime market. He emphasized that on a down market there was always a tendency to do this. He further emphasized that the average feeder would be better off to go ahead and sell his cattle when ready than to attempt to hold for a month or two and thus "knock the props out from under the prime market," because his fellow feeders also in some degree hold, and it doesn't take many extra holders to turn the "good market" relatively in a "deuce of a poor one." There is a good thought in this proposition—think it over!

I interviewed a number of market men, packers and others during the International, at the time when the cattle market was "indigo," or deep blue, and the average prediction was for about 12 cents for fat cattle of 60 per cent dressing grade, Chicago, in April this coming year.

The hide market affects our fat cattle market most markedly. Hides, No. 1 native steer, have dropped from 51 cents down to as low as 14 cents per pound. With a 70-pound hide like we take from our experimental 1,300-pound steers (and this is rather light), this means a difference of $25.90 per steer, or practically $2 per hundredweight on the live steer. A 10-cent difference in hides makes a difference on foot of about 50 cents a hundredweight in this case. Surely hides are too low now, and should advance—but when?

A year ago steer fat sold by packers in Omaha for 48 cents. In late November it was worth 8 cents. A 1,000-pound steer, average, at Omaha, yields about thirty pounds of fat. Here is $12 less for fat product, a difference in value on foot of $1.20.

I have been told by one whom I thought knew that the packers' selling costs, including buying, driving, killing, dressing, chilling and loading, have increased, as for instance at Omaha, practically ten times as compared to a few years ago, and the cost, instead of being 55 cents a head, is now around $5.50—this in a 1000-pound steer. Five dollars difference makes 50 cents per hundredweight difference in the live weight value. The question arises: Will packing house labor come down, and when? This will take time, hence the producer has no immediate relief in sight on this score, altho he should feel some consolation in Judge Alschuler's recent decision in Chicago to the effect that for the present the wages of packing house employes would remain stationary.

Verily, the beef producer needs some sort of co-operative organization that can keep him posted on the various factors that affect the cattle market, and the cattle futures, as judged from the beef, fat, hide and other demands. Now we roam in the dark, and bump each other's noses. But are cattle feeders ready to join together and pay the price necessary to create a cattle feeders' co-operative association? This brings us to the questions and problems of co-operation.

Some of the problems that need to be seriously considered by all of us in the cattle feeding business are:

1. The Co-operative Shipping Association.—This movement is making splendid progress, and the outlook is very promising. In our state here the shipping association offices with the state Farm Bureau, and they work in close harmony. This movement is making real progress in a number of states, and should be encouraged. It is an encouraging proposition for the small feeder and producer, and deserves the kindly treatment of the car-lot shipper. It is gratifying to see the live stock producer control and handle absolutely his own products from farm to market commission house. In this movement, as in others of a co-operative nature, some mistakes are made, but the members realizing that it is their own organization, and hence their own mistakes, show a tolerant and practical attitude by working for the elimination of errors, sticking tight, and thus fostering the upbuilding of the co-operative spirit. This is the time for live stock producers generally to keep their hearts set on the big principle of co-operation, and to pass up petty and small grievances as mere incidentals. In human life, in pig life, in all life, it's the babies that have the hard time pulling thru, hence our baby organizations now need all the helpful influences available everywhere.

2. The "Eat-More-Meat" Campaign.—This was inaugurated by the National Swine Growers' Association in Chicago, at International time. A resolution was passed to the effect that this entire matter receive the thoughtful consideration of all interests concerned, including producers, producers' organizations, breed associations, state and national Farm Bureaus, live stock commission houses, packers, retail dealers and others, and that a meeting of all interests be called later. Here is a proposition that needs to be carefully gone into by all those who have power to speak

and act for the interests involved. There isn't any question but that meat has been libeled and misrepresented in an entirely unwarranted fashion, but in spite of this people generally eat meat when they can afford it. On the surface, the "Eat-More-Meat" campaign is a laudable one, but there are a good many questions of policy to thresh out and agree upon before real progress can be made along this line. It is well for cattlemen to give this proposition thought.

3. Co-operative Selling Organizations, or Commission Houses.—This whole question is being thoroly threshed out, and the new Marketing Committee of Fifteen of the American Farm Bureau Federation will have this problem on its hands. Here again cattle feeders will do well to study the eight reasons advanced by H. W. Mumford, of the Illinois Agricultural Association, Chicago, for the establishment of such co-operative commission houses. These were set forth fully by him at the recent Farm Bureau conference, Chicago. Undoubtedly Professor Mumford would be glad to send these to all interested. On the other hand, President E. C. Brown, of the National Live Stock Exchange, which is an organization of local exchanges, recently wrote for the American Co-operative Manager quite a lengthy article on the inadvisability of farmers establishing their own co-operative live stock commission houses. Naturally, cattlemen will find much of practical interest in these two viewpoints, one coming from a representative of the producers, the other from the National Live Stock Exchange president. I take it that a copy of President Brown's article may be secured from him, by addressing him at the Union Stock Yards, Chicago, Illinois.

A successful packer recently told me that it cost his house about one-fifth as much to buy cattle as it did the farmer to sell them under present conditions.

Some successful co-operative commission houses are now in operation, hence live stock producers everywhere will do well to give this matter their most careful consideration, with the end in view of deciding whether or not it is to the meat producers' interest to establish such houses at the various markets, and thru them handle in a co-operative way the selling end of their business.

4. Is a Corn Belt Cattle Feeders' Co-operative Association in Order?—You are, or will be, wrestling with this great problem. There isn't any question but that the cattle feeders need to get together, and stick together. The big question is, Are you as cattle feeders ready for such an organization, and are you ready and willing to pay the price to create it?

Some things are pretty certain:

First, that cattle feeders are now working in the dark as regards supply of beef and consumptive demands of beef, hide demand, fat futurities, export and import prospects, and countless other matters. They need this information.

Second, that cattle feeders do not know how to avoid bad breaks in the market. They come when they guess they should, and they stay away sometimes when they shouldn't. They guessed this year that International time would be a good time to come in, because perhaps last year too many came and got nipped, hence they thought the gang wouldn't be in this time—or maybe by some other psychological method they hazarded their cattle fortunes. Those that came in pell-mell this year had plenty of thrills—but they all went up and down their backbones in shuttlelike fashion. It will be a slow and painful recovery for a good many; and yet the packers will tell you that for weeks previous the branch houses in the east and elsewhere were having their troubles in moving beef. But the producer didn't know this; he should have an organization to inform him.

The week before Thanksgiving about 100,000 cattle arrived in Chicago, or twice too many. On Monday came 39,000; on Tuesday, 27,000; on Wednesday, 18,000, and on Friday and Saturday some more—and then the crash!

The packers have a pretty fair line on what the country will absorb of beef from week to week, because of their intimate touch with their thousands of branch houses or distributing points thruout the country, and they tell me they would be glad to work with a big, effective cattle feeders' co-operative association so as to predict about how many cattle the Chicago market could absorb weekly to advantage, which number being settled upon by the co-operative association and fortified by independent advices of their own, would constitute the number that the association would strive to have on the market for each week—in truth, for each day of the week.

Bad breaks could be in large measure controlled by the receipts being controlled—this in harmony with the outlet demand. And receipts can be controlled by a co-operative cattle feeders' association that carries in its membership a sufficient number of corn belt feeders. The zone system helps some, but it is a mere trifle compared to the control needed. The zone system helps somewhat to distribute daily receipts, but the market can be flooded in any one week, as happened Thanksgiving week, above all weeks.

All handlers of beef know that Thanksgiving week is a bugbear for beef trade, because of the competition from turkey, chicken, goose, duck, fowl of most any kind, and even rabbit—these being eaten in place of beef. But how many producers know this? Suppose they do; one then figures in this way:

"Everybody knows this, and will stay away. I'll go in." He goes. He finds the rest all there. Another one says the opposite to himself, and stays at home. He may be lucky, that's all.

What is needed is for their co-operative cattle feeders' association to tell them when to come, they of course giving their preference as to about when, and the association getting them in as near that time as possible.

There is one effective way to avoid over-runs and under-runs, and that is for the feeders to organize and control themselves. Are the cattle feeders ready to pay the price of loyal co-operation to do this? I hope so, because in the end they will be amply repaid, and should be more contented than they are now.

Third, that cattle feeders generally are pretty thoroly disgusted with a good many "feeder cattle market practices," and wish them remedied. Individaully, the cattle feeder can not reform the game; collectively, he has a splendid chance. It's worth the price of organization to try some of these things.

There are a good many other things on my mind in regard to cattle feeding problems, but I will reserve them for the present. We have plenty of propositions to work out and execute as the matter now stands. Let's be up and doing; let's do our own work well, put more study on co-operation and co-operative methods, and then let's begin at once to practice co-operation, co-operation—ever bearing in mind that a job worth doing is worth doing well.

There are always some folks who say others are fools for trying to do things, fools for thinking on certain things, fools for doing what they do, and in this connection I have gained much encouragement and consolation and real inspiration from a motto which hangs in the office of the editor of Forbes' Magazine, New York City, a successful, two-fisted magazine edited by a Scotchman, B. C. Forbes, who, by the way, was called "all sorts of a fool" when he gave up a highly-paid financial editorship—the best paid in the United States—to start this magazine of his. The motto reads:

"They said it couldn't be done,
But he, poor fool, didn't know it,
So he went ahead and did it."

Mr. Brockway: There is a resolution I would like to offer to send to Mr. Evvard at this time, to send him a message of good cheer, etc.

The President: If there are no objections we will entertain it.

Mr. Brockway: Resolved, that we much regret to learn of the temporary illness of Prof. John M. Evvard, and direct the president of this association to send him a message of sympathy, and express our hope that he may speedily recover.

The President: You have heard the resolution—is there a second to it?

Motion seconded, and on being presented was unanimously adopted.

The President: The committee on resolutions will consist of J. M. Brockway, of Letts; S. M. Corrie, of Ida Grove; Will Larrabee, of Claremont; Dave McLaughlin, of Washington; W. P. Dawson, of Aurelia; Joseph Coffman, of Guthrie Center; Warren Nichols, of Minerva; Ralph Sherman, of Grinnell; Emil W. Weise, of Ellsworth, Minnesota.

The convention then adjourned for lunch.

TUESDAY, DECEMBER 14, 1920.

AFTERNOON SESSION.

The President: Now, gentlemen, without any further ceremony we are going to get right down to business, as the time is passing swiftly and we have a lot on for this afternoon, and without any remarks I am going to introduce Mr. Harlan, our Chicago representative, who will make his report and show you what he has been working on in Chicago in the interest of the feeders and live stock producers of the country. Mr. Harlan.

REPORT OF THE CHICAGO OFFICE

By C. L. Harlan.

The opening of an office at the Union Stock Yards, Chicago, was the result of an agreement reached between the Corn Belt Meat Producers' Association and the Iowa Farm Bureau Federation after the annual meeting of the Corn Belt Association last February, by which the two organizations agreed to employ a live stock marketing agent who should devote himself to the interests of the live stock producers of Iowa. The speaker was employed as such agent and started work the first of last March. At that time there was no decision as to what the work should be or along what lines it should be undertaken. However, as the greater part of the Iowa live stock supply finds a market at the Chicago stock yards, and as that market is to a very considerable extent the one at which live stock prices are made, it was thought that it might be well to have a representative on that market to represent the interests of Iowa producers and to study the methods and practices by which live stock is disposed of at this great marketing center.

The speaker went to Chicago and spent a month looking over the situation at the market to study the question as to whether it might be worth while to open an office there and to devote his time to the first-hand study of the live stock marketing situation. He interviewed a number of leading representatives of the various interests that make up the market, spent some time watching the actual workings of the market, and concluded that it would be worth while. This conclusion was reported to the directing heads of the two organizations and the decision was made that the office should be opened.

It was decided that the plan of work should be something as follows: That the office or bureau should be available to Iowa shippers for the purpose of making investigations of all complaints as to treatment of stock or of shippers en route or at the market and to endeavor to get conditions responsible for such complaints modified or remedied; also to act as an information bureau or an investigator as to market conditions and market practices upon request of the officers of the associations or of individual shippers.

Secondly, that the speaker should act as representative of the two organizations affiliated in the work to attend various meetings, conferences, hearings, investigations, etc., to keep in touch with what should take place, and to speak for the interest of Iowa producers or of live stock producers generally when those should be involved.

And finally it was decided that effort should be concentrated on the making of a thoro study of some particular kind or class of stock; and because of the large part Iowa plays in the production of corn-fed cattle, and also because of the generally unsatisfactory conditions existing in this industry, it was decided that this special study should be made of the fed cattle situation, but being limited to consideration of steers and yearlings. This study was to include the gathering or securing of all available data as to receipts, prices, centers of production, purchasers, disposition of the animals and the product, the channels of distribution thru which the products go into consumption, the channels of consumption, the forces and conditions that influence the consumption, the relations between the prices of the cattle and the resultant products, and to try and develop a statistical basis for future use in studying the production and distribution of these cattle. Included with this was the making of a first-hand study in the actual market of the efficiency of the present marketing system in the marketing of such cattle, whether there might not be some changes or modifications in methods or practices desirable, and as to how these could best be brought about.

Inauguration of the Work.

Preparations for the work were started about April 1, but because of the inability to get office space immediately in the Exchange Building, an office was not opened until the latter part of the month. However, the then head of the local Bureau of Markets, Mr. Doty, and afterwards his successor, Mr. Baker, very kindly allowed the use of a desk and a corner in the office of the bureau at the yards until an office could be secured.

The project was accorded a variety of receptions—from a very cordial and apparently sincere one to a cold and semi-hostile one by men connected with the various activities of the market. From the officials of the Chicago Live Stock Exchange it was of the former kind, and the relationship maintained with the officers has continued pleasant and mutually helpful, and this occasion is taken to express the gratitude of the speaker to the men who are at present at the head of the exchange. The same thing can be said of the officials of the Stock Yards Company, who have given at least a receptive ear to suggestions and have shown willingness to furnish such information as has been requested or have made available the records for securing it. The relations with the Bureau of Markets of the Department of Agriculture have been always pleasant, and the great value of the work being done by the bureau at the yards has been increasingly evident, as has been the sincerity and earnestness of the various market reporters of the bureau for the reliability of their information; access to their records has been freely granted, and all requests for other information or assistance have been kindly received.

Friendly and mutually helpful relations have been maintained with the local market journal and with the different men who are engaged in reporting the market for various city and agricultural journals, and considerable information and any desired publicity have been secured thru them.

Relations with salesmen and buyers in the cattle alleys have become progressively more friendly—due perhaps to a realization that the speaker knew something about the industry, that his desire for information was largely disinterested, that he was not a theorist with pet ideas to exploit or a wild-eyed reformer who wanted to wipe out the present system to set up one of his own, and that he could keep to himself information that was given him in confidence. And while there still exists a more or less archaic class of men who incline to the belief that the business is a private one and that outsiders are entitled to only what they are inclined to give in the matter of information, and who are still suspicious of anyone not directly included within the charmed circle of the trade, happy to say this is not the attitude of the younger and more progressive men who are an increasing element on both the buying and selling side.

Such relations as have been maintained with representatives of the packing interests have been friendly and mutually appreciative, and while the matter of getting a lot of desired information that was and is regarded as highly desirable for the understanding of the whole situation as to price making and price relationships has not yet been successfully completed, there are grounds for hoping that it eventually will be. Aside from this matter, which will be discussed at some length later on, requests for information have always been well received and readily complied with.

With regard to how the plan of work has developed in practice, a word might be said here. Some work has been done in the matter of complaints and information, but not to anything like what was expected, and this work has been only a very minor part of what has been done. This has been due to considerable part to the rather unusual conditions that have existed in the whole industry during the past months, which have been of readjustment to new price levels in the general process of commodity deflation, and when live stock prices have been declining as they have and involving such great losses to feeders above production costs, minor complaints as to service or charges have tended to sink into insignificance; in part, perhaps, also to the fact that feeders and shippers generally have not been aware that such a service was available to them.

As representing the Iowa live stock industry at various conferences, meetings and hearings, there has been a very considerable opportunity for such activity, for the past six months have been full of such events. In fact, altho without any comparative figures to back it up, one is inclined to the statement that there has been more of this sort of thing since last spring until the present time than during any similar period in the history of the industry. These have been called by all sorts of organizations for all sorts of purposes, and there has been a great outpouring of protests and resolutions dealing with the live stock situation—some of which have resulted or will result in active measures of relief, others of which have resulted only in much talk and the conditions remain as tho they had never been held. The trouble has been that altho many persons were conscious—painfully conscious—that things were not going right, there were few who could correctly diagnose the causes of the trouble, and fewer who were prepared to offer concrete remedies for concrete disabilities. In the face of threatening conditions live stock producers have found themselves helpless to take any united or concerted action—and it is to be hoped that out of this consciously felt helplessness a will and a desire for self help may be developed.

It has been, then, to the third activity—that of making a careful study of the whole fed cattle situation—that the greater part of the time has been devoted, and from which the most promising results have been obtained. Heretofore corn fed cattle have been considered as simply one part of the supply of cattle produced in the general cattle industry, and the producers of such cattle as an inseparable part of the general class of cattle producers, and very little attempt had ever been made to consider it as an industry in itself or the men engaged in it as a class rather definitely separated from the bulk of the men engaged in the breeding and raising of cattle. For this reason, there was and is very little available information of a concrete and dependable kind dealing with the production and distribution of these kinds of cattle, and it has been to the building up of a method of getting this information and of using it for constructive purposes after it has been obtained that the most effort has been given.

In order to study price relations and price fluctuations of any commodity it is necessary to have some fairly accurate information on the side of supply—for price is the monetary level at which an effective consumers' demand will take a given supply at a given time, and to understand how it is determined it is necessary to know both the demand and the supply sides. But there are no figures as to past supplies of corn fed cattle, and no attempts have been made heretofore to secure them. As a beginning, then, it was felt that something should be done to try to get some dependable information along the line of supply of such cattle. After consideration of all possible sources of such information, it was decided that the only way it could be secured in the detail desired was directly from the account sales of the various commission firms at the Chicago market. The matter was taken up with the officers of the exchange and was brought by them before the directors, and the latter passed a recommendation to the members of the exchange that they furnish or make available the information desired. This recommendation was incorporated in a letter of introduction, and all the member firms were visited and the matter was taken up directly with responsible members of the firm. The request met all kind of responses. For the most part, few could see the need of getting such information, nor any value it would have if it were secured; most were unwilling to have anything to do with it if it should involve any additional work on the part of their office forces; some firms absolutely refused either to furnish it or to make available their account sales from which it could be taken. As a general rule, the larger the firms and the more of these kinds of cattle handled by them, the more kindly was the reception and the easier it has been to get the information. At the start it was thought that each firm could be induced to make out a daily slip of the previous days business, and that all that would be necessary would be to go around and pick up these slips. In practice, it was found that this would not work, and that the only way it could be secured was for a representative of the bureau to take it himself directly from the account sales. And with one or two exceptions this is the manner in which it has been secured.

This information had to do with native steers and yearlings. The slips called for lot sales—that is, the number sold and weighed at a given price—and covered the number of head, the average or total weight, the sale price per hundredweight, the state in which the shipment originated, and the name of the buyer. The conditions under which it was secured made entire accuracy impossible, but in the light of the knowledge of the size of the business of the firms who have furnished it or made it available, and of those who have refused or have made it difficult or impossible to get it, it is probable that it is from 90 to 95 per cent correct on the better grades of cattle—the good and choice and prime—and between 80 and 90 per cent correct on the poorer grades—that with regard to the cheapest kinds being the least accurate.

But at best this method of getting this kind of information is not satisfactory; it should not be necessary to depend upon the willingness of individual commission firms as to whether it can be secured or not. The great live stock markets are public markets, and what takes place there is a matter of public concern. The commission firms who have a monopoly of the selling there have established themselves in a strategic position in the bottle neck thru which live stock goes from producer to consumer. It is not at all true to say that they are simply private individuals carrying on an exclusively private business, which they can control to suit themselves. In a matter like the present one, that of getting information which the producers of cattle consider as vitally necessary for them in order to know and to conduct their business, it is not a fair situation that they must depend upon the volition of a group of men situated as these are as to whether they can get such information or can get it accurately. There is only one way in which such information can be secured as it should be, and that is by putting this business under some sort of governmental control that can require each firm engaged in it to furnish the Bureau of Markets a duplicate copy of all their account sales, which shall be open for inspection by interested persons duly authorized by the head of the local bureau—or, better yet, for the bureau itself to be adequately financed that it can undertake this work.

Another activity undertaken by the speaker has been that of spending a couple of hours each day in the cattle market, watching the actual progress of the market, and studying the character of the receipts. An attempt is made to visit all sections of the yards and to see the actual sales as they are made. There have been several objects for this. Among these have been the wish to form an independent conclusion as to the fluctuation of prices and to check these against those published by the live stock and daily press and those given out by the Bureau of Markets. Another has been to try and determine how nearly the same classes of cattle are selling at equivalent prices in different sections of the yards or how wide variations may be at the same time on the same day, and what is responsible for such a situation. An attempt is also made to see enough sales of the better grades of steers made to justify a conclusion as to whether the grading by the Bureau of Markets in terms of prices indicates the actual market situation as to the different grades, or whether there is a tendency to shift grades from time to time with changing prices. An attempt is also made to estimate the comparative skill of the buying and selling forces and to follow the tactics of each on both advancing and declining markets; also as to the amount and nature of the buying and selling competition and how it makes itself evident. And I will state right here that there is plenty of evidence of competition. With a good beef market and a short run of cattle there is keen competition among buyers to get the supply; and with a poor beef market and a big run of cattle there is keener competition among sellers to get their consignments sold. That is, it is a competition that works both ways and of which both interests take advantage when conditions favor their side.

Character of Information and Use To Be Made of It.

The general plan for gathering and the utilization of the information deemed desirable for a rather complete understanding of the market situation of beef steers—especially the better grades—both as live animals and as beef, was something as follows: From the commission firm account sales would be obtained the daily sales of steers, and on the basis of the price quotations for each day as published by the Bureau of Markets these would be graded as choice and prime, good, medium, common and low grade or cheap. Each grade would then be compiled separately and the information as to each secured in such detail as was thought useful. With regard to the two better grades, this would include the number of head, the number of heavy and light weights—above or below 1,100 pounds; the heavier weights according to three divisions of weight, 1,100 to 1,300, 1,300 to 1,500 and upwards of 1,500; the state where they were fed and the buyer—whether a packer buyer, a shipper or a local butcher or speculator or other. The receipts of these cattle from each of the leading feeding states were compiled separately so as to show the number coming from Iowa, Illinois, Missouri, Nebraska, South Dakota, Indiana, and from other states they were included under "all other." For the poorer grades less detail was thought sufficient. With a fairly accurate knowledge of the receipts of the different grades of these steers there was a chance to study the effects of varying receipts upon the prices of the different grades and learn something as to the numbers that the market can absorb at fairly steady prices, and also learn to what extent the prices of different grades of cattle follow an independent course influenced by the receipts of that particular grade and to what extent cattle prices as a whole move together for all grades.

To be used in connection with those figures as to receipts of cattle, certain information was thought desirable from the packers to throw more light on the situation in the yards as to the buying and selling, and also as furnishing a basis for conclusions as to what were the packers' results in handling certain grades of cattle. The matter of getting this information was taken up with one or two of the packing firms separately, and was afterwards taken up thru the Institute of American Packers at the suggestion of the packer representatives, in order that it might be obtained from more sources and be more representative. A schedule of the desired information was made out and sent to Mr. Dudley, of the institute, who took up the task of finding out whether the packers would be willing to give the information in the form desired or in a fairly similar form. These negotiations dragged along for some time, and resulted in one or two conferences that brought no results; the packers were inclined to doubt whether the information could be obtained in such a manner as to be useful, and were perhaps suspicious of the use that it might be intended to make of it. Finally, with the transfer of Mr. Dudley to New York, the attempt to settle the matter in this way was given up and it was decided to approach it from another direction.

During the various conferences in other places, the representatives of the packers had rather insisted that this was a matter to come before a representative joint committee of packers and producers, and expressed the desire that it be held up until after the appointment by the president of the American Farm Bureau Federation of a producers' committee to sit with a committee representing the packing interests—the producer members of the former producers-packers joint committee having made the recommendation that this matter should be turned over to the Farm Bureau.

But after some discussion among the officers of the Corn Belt Association and the heads of the Iowa Farm Bureau, the conclusion was reached that there was little good to come from such a joint committee of packers and producers unless the latter had some assurance from the former that they could get such information as to the packing end of the industry as would enable them to sit in a joint conference with all the information needed to back up their contentions—that there was little to be gained where they had to accept the statements of the other side without some means of checking them up. It was also thought that if any good was to come from such an attempt that the work of such a joint committee must be carried on in much different fashion than was that of the former joint committee. That the time for "let's get together, boys, and talk things over in a friendly way, and learn what fine fellows we are and how interested we are in you" type of conference was past; that what is needed is more of a meeting of technical experts—men who know the industry in all of its aspects, and who can meet with something like an equality of organized information and tactical situation; that the relations between producers and packers are industrial and economic and not social, and that they should be considered exclusively from the industrial and economic aspects.

With the intention, then, of trying to establish a basis for the work of such a committee or at least to find out whether it was possible that such a basis could be established, and if not, to be in a position to oppose any attempts to inaugurate it on the uncertainties of the former packer-producer committee, it was decided to draw up a memorandum to be submitted to the heads of the larger packing organizations for their consideration, which would be a statement of what was deemed a fair understanding under which such joint activity should be undertaken. This memorandum was sent to the heads of the four large Chicago packing houses by the president of the American Farm Bureau, with the request that they consider it and give an unequivocal reply as to whether they were willing to subscribe to the propositions of the memorandum as a basis for future joint committee activity, and if they were willing to give the information asked for and such similar information as might be asked for in the future. Replies acknowledging the receipt of the communication were received from the various heads with promises that the matter would be given careful study and the decisions reached would be forwarded later. In the meantime the matter of calling a conference of all the live stock interests came up and the conference was finally held. It resulted in a recommendation that the president of the American Farm Bureau appoint a committee of fifteen to consider all matters of interest to the live stock industry. No further communications having been received from the packing house heads, it was thought that it might be well to let the matter rest where it is and bring it all before the committee of fifteen when it has been appointed and ask that the committee endorse the memorandum or one similar to it and establish its acceptance as a pre-requisite to a recommendation of the appointment of a joint producer-packer committee.

As to his own attitude in this matter, and it is a subject in which he is very greatly interested, the position of the speaker is something like this: From his own study of the situation and a fairly wide knowledge of both the technical and theoretical sides of the live stock and live stock products industries, he is convinced that a very great deal of good can come out of the organization of such a joint producer-packer committee, if the work is established on the right basis and is undertaken in the right spirit. In fact, he is convinced that the success of any and all movements toward putting the whole live stock industry on a better basis will depend to a very large extent upon the amount of practical co-operation and help that may be afforded by the packing interests. But at the same time he has witnessed or has been informed of the futility of so many similar undertakings, which have mostly developed into an outpouring of words and opinions and ended in a passing of resolutions, that he is rather skeptical as to what may come out of any such undertaking. And as much as he thinks such co-operation is needed, yet he would be opposed to the producing interests involving themselves in any such project until they shall have received specific assurances from the packing interests similar to those contained in the above memorandum. And then the success of the undertaking will depend very largely upon the character of the men who make up the committee—whether they have the knowledge and training needed, whether they come as partisans with minds closed to everything but their own opinions and own interests, whether their decisions can be backed up by the support of the interests they represent, and whether they are willing to undertake to try to solve the major problems or confine themselves to some of the minor ones.

Coming back, now, to the information that has been gathered as to the market movement and disposition of the class of cattle, the study of which was undertaken, it is evident that the usefulness of what information has been obtained is diminished because of the inability to correlate it and carry it further on the basis of information that it was hoped to obtain from the packers. But the information obtained is of very great value as throwing light on the production end, and there is where the producers' interests are largely centered. The producer is interested, and very rightly so, in the disposition that is made of his product, but under the most favorable conditions the extent to which he can influence this distribution is very limited. In very large part he must confine his activities to the better control of the production and the marketing of his live stock, for it is in this direction that he can exercise the only control possible to him over price—and in the final sifting the question of price is the all-important one. The information that has been secured has therefore been arranged in such form as to indicate the effects that supply and distribution have upon price in order to make possible a consideration of the question as to whether there are not better methods than now in operation for the control of the production and the distribution of the supply in the interest of price.

To this end charts have been made showing the daily fluctuations in the prices of different grade of steers with the daily fluctuations in the wholesale prices at Chicago and at the three leading eastern markets of similarly named grade of western dressed steer carcass beef—the prices in both instances being those of the Bureau of Markets. With these are charted the weekly receipts of the corresponding grades of steers at Chicago, the total weekly receipts of all cattle at Chicago, and the total receipts at the seven leading western markets. The receipts are charted by the week because under the conditions under which they are obtained each day's receipts can not be accurately determined, and also because the effect of receipts on price is largely cumulative for the week rather than determined by each day's receipts. That is, it is each day's receipts taken in relation to the receipts of the preceding days and the estimate for the following day that influences price rather than each day's receipts taken by themselves.

These charts show quite plainly the close relation that exists between the dressed beef market and the cattle market, and how the two go up and down—if not always exactly together, fairly uniformly. On some occasions, as will be pointed out, the advance or decline appears first in the cattle market, but as a general rule the movement in one direction or the other is inaugurated in the beef market. And as a matter of practical fact, as well as of economic analysis, it is in the beef market that the price of beef cattle are determined; that is, that the price direction is from the beef and by-products markets to the cattle market, and not from the cattle market to the beef market, as is quite commonly assumed. It is true that at times they may be going in opposite directions, or one changing and the other remaining stationary, but this is due to temporary circumstances during periods of readjustment following rather sudden and severe price fluctuations. Undoubtedly, the supply of cattle affects their price even when there has been no change in the beef market; for in the purchase of cattle the buyers take into consideration not only prevailing prices of beef but also undertake to forecast the situation in the beef market when the present supply of cattle will come into it, in a week or ten days; if supplies of cattle increase even if the beef market is firm, the chances are that the beef market will weaken when the increased supplies of beef are received, and attempt is made to discount this decrease; on the other hand, if cattle supplies are short and the beef market is no more than steady, cattle prices will advance because the decreased supplies of beef in the near future will ordinarily result in an increased price for beef. As between the two markets, there is an intricate play of supply on demand and demand on supply that makes it difficult at a given moment to say which is the preponderant force, but as beef cattle have a value only as the beef from them can be sold, in general it is the price at which consumptive demand will take this beef that determines the amount that can be and will be paid for the cattle.

The charts also show the extent to which the prices for the better grades of cattle follow a course of their own, depending upon the supply and the demand for the best grades of beef, and the extent to which they follow the general market and are influenced by the supplies of other kinds and grades of cattle and by the demand for poorer grades of beef. During the eight months which are charted there are three rather distinct situations in the supply and price relations for good cattle. In the late spring and early summer, May and June especially, there was a period when there was a great over-supply of the good grades of cattle, when these made up nearly 25 per cent of the Chicago receipts, and the market was filled with medium and long-fed cattle and the supply was far in excess of the consumptive demand for the resultant grades of beef, or at least the demand from the ordinary channels thru which such beef goes into consumption. As a result, the prices of these cattle and of this grade of beef declined until they were almost on a parity with those of the poorer kinds, and at the same time there was no great decline in the prices of the poorer kinds—which indicates that there was not an over-supply of cattle and beef, but an over-supply of certain grades of cattle and beef. The number of consumers who demand these best grades of beef is comparatively limited, or rather the demands of the consumptive channels thru which these good grades go is limited, which is not exactly the same thing—and while they will take this limited amount at a good price, any excess above this amount that must be disposed of thru other channels or forced thru this channel will force the price of this grade down to near the level of the poorer grades that have a much wider consumptive demand.

The second situation was during the late summer and fall. Here is a period during which the supplies of these good grades of cattle came to the market in fairly even volume, when the demand for the resultant beef was sufficiently large to take it at a fairly steady price and insistent enough that the price of beef advanced as the supply of these cattle decreased. Following the congestion of May and early June, there was a period of readjustment during which the price of beef went sky-rocketing, reaching the highest point ever recorded, and then came down with equal velocity to find a level that took the supply offered for the following weeks at a quite stabilized price. For this period the statement is perhaps justified that under the industrial and financial conditions that influence the consumptive demand for this kind of beef then existing, the supply was just about equal to the normal demand or a little short of it—and from both the producers' and packers' point of interest a small shortage in the supply is desirable, and a quite stabilized market was the result.

The third situation is that of the period beginning about the first of November and lasting up until the present time. Here we have the apparently anomalous situation of a declining market in the face of a very small supply of these particular grades of cattle. With supplies becoming smaller every week before the first of November, the market did not advance, and had much difficulty in maintaining itself. Evidently, the demand for this special commodity was falling off, and what there was refused to take the very limited supplies at advancing prices. After the first of November, the supplies did not show any increase, but prices began to decline and with some recoveries have continued to do so. Explanation for this condition must be sought on the demand side. Either there was a great curtailment in the consumptive demand for meat in the channels thru which this kind of beef usually goes, or this demand for meat was being satisfied by other competitive meats that could be obtained at a cheaper price, or for which there was a seasonable demand. Doubtless all of these conditions existed to influence the demand, while at the same time there were very large receipts of other kinds and grades of cattle that flooded the market with cheap beef and broke the price of both cheap cattle and cheap beef to quite low (comparative) levels which dragged the prices of the better grades with it. It was also a period of rapid decline in commodity prices of all kinds, and this could not help but have a sympathetic effect on this commodity.

In order to understand what may have caused a falling off in the demand for this beef, a consideration of the consumptive channels thru which it goes might be of interest here. The figures which we have secured show that about 56 per cent of the two grades of steers, good and choice, are bought by the packers, and about 33 to 35 per cent by shippers. But these figures do not show the exact situation, as a good many of the cattle shown as bought by packers are really shipped east alive, this being especially the case with cattle bought by Wilson, who is one of the largest buyers of the better grades of cattle, but which cattle show on the account sales only as sold to Wilson, with nothing to indicate whether for shipment or for Chicago slaughter. It is probable that around 40 per cent of these cattle are shipped alive, mostly to eastern markets.

Information has been secured from some of the Chicago packers as to the manner in which the beef from these cattle is sold and as to the consumptive channels into which it goes. Assuming that 60 to 65 per cent of them are slaughtered in Chicago, it is learned that from 70 to 75 per cent of the Chicago slaughtered beef is shipped east, which results that the beef from around 85 per cent of these cattle is consumed in the east. Practically all of the eastern slaughtered animals are Koshered, and around 20 to 30 per cent of the Chicago slaughtered. Nearly all the Koshered carcasses are sold as beef cuts and enough more of the regular slaughtered to result that 90 per cent of the entire slaughter is sold as cuts and only 10 per cent as carcass beef. This grade or these grades of beef are scarcely ever frozen, but the whole supply goes into consumption as fresh beef, and the practical outside limit that it remains in the hands of the packer after slaughter is ten to fiften days. Of the carcass, only about 35 per cent on the whole goes into the retail trade for household consumption, and 65 per cent is sold either to jobbers or direct for the hotel, restaurant, dining-car, club and similar consumption; and of the 35 per cent to the retail trade the greater part is from the front quarters and the rounds. Between 90 and 95 per cent of the ribs and loins go for public catering consumption, and only between 5 and 10 per cent into the retail trade; so when the local butcher undertakes to assure you that he is selling you a steak or a rib roast from a good or choice steer carcass, you are fairly justified in doubting his veracity.

There are, then, two very important channels of consumption into which this beef goes—the so-called better cuts go into the kitchens and grills of hotels, restaurants, dining-cars and clubs, and very largely in the east; the greater part of the forequarters go into the Kosher trade in the great Jewish centers of population in the eastern cities. In the Kosher trade, the demand for better beef can only be met by getting it from better carcasses; in ordinary trade the demand for better or more expensive beef is met by getting it from the supposedly-better cuts. Prosperous industrial conditions among the Jewish population results in an increased demand for beef from better carcasses, while in other consumption it usually means an inordinate demand for loin steaks and rib roasts to the neglect of other portions of the carcass.

If one were seeking then the causes for the falling off in the demand for the beef from these better grades of animals, it should be sought in the conditions prevailing in the hotel and restaurant trade and among the Jewish industrial population. And there is no doubt that the conditions existing in both these for the past two months can account in very large part for the course of prices for the better beef carcasses, and it is apparent that the wool grower is not the only agricultural producer who is interested directly in knowing what are the present and prospective conditions among the workers in the clothing and suit industries in the eastern cities; likewise that the feeder of good cattle is not indifferent to conditions influencing the actions of the rich, the near-rich and the would-appear rich, who make up a great part of the clientele of the hotels, restaurants and clubs where almost exclusively the best steaks and roasts are to be found.

In so far as the charts show any relation at all between the prices of the better grades of cattle and the receipts at the seven western markets, it is that the total of these receipts influences very little the price paid for these cattle at Chicago. This is probably due to the fact that the per cent of the total of such cattle produced in the entire corn belt that are marketed on the Chicago market is so large that Chicago has something of a monopoly in the determination of the price of these grades, and that the receipts of cattle at the river and other markets, even when these are large, contain such a small per cent of these better grades of fed steers that their influence as a price factor is comparatively negligible. It is the supply of such cattle coming to Chicago that apparently influences the Chicago price and that price largely determines the level of prices for the same grades of steers at the other markets.

These charts of the comparative variations in the daily prices of cattle and of similarly named grades of beef, while they show how the two prices move up and down in comparative unison, do not indicate with any exactitude that there is anything approaching a normal or basic spread between the two prices. Assuming that the bulk of the good steers will dress out around 58 to 60 per cent of beef, the prices of by-products remaining fairly constant, if beef advanced or declined $2 per hundredweight, a corresponding variation in the live animal would be around $1.20. But no such exactitude can be looked for, or can ever be expected. The price of beef varies from day to day and from market to market, and there may be as much as $3 difference in the wholesale price of the same grade of beef in different cities on the same day. And altho the prices of beef at the three leading eastern markets usually move in the same direction, there is a great deal of difference in the rapidity of change, and altho the level of prices tends to be restored after it has been disrupted by local conditions at some of the markets, it usually takes some little time before a shifting of supplies can bring about this equalization. And in packing house practice there is no attempt made to sell beef at a fixed margin of gross profit above cost, for it can not be done. Ordinarily, the beef is sold for the highest price at which the supply can be moved, and cattle are bought at such prices that the resultant beef sales over periods of time will show a net profit; but in the process of securing this net profit some beef is sold at no profit, some at a loss, and some at a very good margin. In order to try to determine something as to the nature of this spread, weekly graphs have been kept, made on the basis of steers dressing out 60 per cent, costing at the top range of quotations for good steers, and the beef selling at the top range for good steer beef. The test from which the percentages of the different by-products was secured was made on a lot of forty-seven steers averaging around 1,400 pounds live weight. The prices used are the average weekly range of the top of good steer beef, and quotations for packer steer hides and tallow as given weekly in the National Provisioner. The price of edible by-products is set arbitrarily at 10 cents a pound, and of inedible at 5 cents, as there are no figures available showing what should be the weighted prices of these. Obviously, results obtained under such conditions are good only for comparative purposes, but as the same methods and same sources are used each week, the varying results are useful as showing the weekly relations between the prices of cattle and those of beef and by-products. These show price ratios between the cost of the live animal and the value of the beef and by-products ranging all the way from 1 to .95 up to 1 to 1.27, the ratios being obtained by dividing the indicated value of the beef and by-products by the cost of the animal. These graphs indicate that the ratio is most favorable to the slaughterer when the prices of beef are advancing rapidly, and that they are the most unfavorable when beef prices are declining rapidly, which justifies the statement that the prices paid for cattle lag behind on advances and on declines. It is perhaps also worthy of note that during the summer and fall, when the prices of beef and by-products were fairly stable for a number of weeks and the variations in the prices paid for good beef steers were very small, then the ratios varied between 1 to 1.10 and 1 to 1.15. As these figures are not weighted at all for days or for weeks, they do not represent except in a very general way what were the financial results of the packers' beef operations on this class of cattle, but one is justified in saying that they do not indicate that the packers were making any very large profits, and there are some weeks that certainly indicate that they were meeting with very considerable losses.

It is to be regretted that the data on which these graphs are based is so meager and so uncertain. It was for the purpose of trying to get dependable information with which to support such investigations in order to have a continuous record of such price relations that the schedule of desired information was submitted to the packers. But until some plan can be worked out which will make such information available, dependence will have to be placed on such sources as can be found.

Some general conclusions can be drawn from the total of the information furnished by these various charts and tables. The first is that production of these better grades of fed cattle if left entirely to individual initiative is not apt to be very well adjusted to consumptive demand. It is very plain that a year ago this time too many feeders decided that the May and June markets would be good ones to feed for, and that many thousands too many cattle were put in the feed yards in preparation for those months. The result of this was the flooding of the market during this period with good and choice corn fed cattle and a disastrous decline in prices. In the past such a situation has adjusted itself by the next year most of the feeders who lost in such a maladjustment not feeding or feeding for a different market, and in the same period the receipts ran far short of the consumptive demand and the limited number of feeders who had cattle ready for that time received a high price; that is, excessive receipts during a particular period one year having caused losses, the same period the next year is apt to have deficient receipts and instead of production being more or less adjusted to probable demand it is influenced very largely by the experience of the previous year. Such a condition does not make either for a stable or a prosperous industry so far as the great bulk of feeders are concerned, and it is fairly evident that it is no more satisfactory to the manufacturing and distributing interests of the industry.

A second conclusion is that the distribution of the production when it is ready for market, controlled as it now is by individual action as influenced by changing prices, does not result in the best distribution possible for bringing the largest gross returns and the highest average price to the largest number of producers. Instead of being fed into the market hopper in a fairly uniform stream, it is apt to be dumped in in chunks, which results in alternate periods of choking and racing of the machine, and in very considerable inequality in returns to feeders, which is not ascribable to better judgment on the part of the more fortunate, but almost entirely to better luck. And so long as no other method of marketing the available supplies than this is found, such conditions may be expected to continue.

A final conclusion is that so long as cattle feeders continue to act as individuals and are unwilling to surrender some of their individual rights of action to the good of the industry as a whole, such conditions must be expected to mark the history of the industry in the future as they have in the past. Some organization for a unified control of the production and distribution of corn-fed cattle which shall include the greater part of the producers of such cattle is the first requisite for improved conditions in the feeding industry.

I will now show you some charts on which these figures are based:

CHOICE CATTLE.

Total, 92,047; heavy, 76,396; light, 15,651.

	No.	Pct.
Iowa	42,260	45.9
Illinois	34,614	37.6
Missouri	5,780	6.3
Nebraska	3,154	3.4
South Dakota	1,940	2.1
Indiana	2,830	3.1
Others	1,469	1.6

(4.4 per cent of total; 14.1 per cent of steers.)

Packers	51,703	56.2
Shippers	34,926	37.9
Others	5,418	5.9

GOOD CATTLE.

Total, 171,758; heavy, 140,521; light, 31,257.

Iowa	84,707	49.4
Illinois	53,668	31.3
Missouri	12,958	7.5
Nebraska	5,076	2.9
South Dakota	3,744	2.2
Indiana	6,263	3.6
Others	5,342	3.1

(26.4 per cent of steers; 8.3 per cent of total.)

Packers	97,240	56.6
Shippers	54,292	31.6
Others	20,226	11.8

MEDIUM CATTLE.

Total, 192,253.

Iowa	96,253	50.1
Illinois	49,550	25.8
Missouri	23,514	12.2
Others	22,936	11.9

(29.5 per cent of steers; 9.2 per cent of total.)

Packers	112,831	58.7
Shippers and local butchers	50,237	26.1
Others	29,185	15.2

These three charts bave to do with the receipts of three grades of native steers at Chicago for the period of eight months from the first of April up to the first of November. Of the "choice" total receipts, there were something over 92,000 head, and divided on the basis of whether they weighed above or below 1,100 pounds. As to where those cattle originated, Iowa furnished something over 42,000, or 45.9 per cent of the total; Illinois furnished 34,614, or 37.6 per cent; Missouri, 5,780, or 6.3 per cent; Nebraska, 3,514, or 3.4 per cent; South Dakota, 1,940, or 2.1 per cent; Indiana, 2,830, or 3.1 per cent, and all other states, 1,469, or 1.6 per cent.

Now of the total cattle supplies received in Chicago during the eight months in this grade of steers, the packers bought 51,703 head, or 56.2 per cent of the total; shippers bought 34,926 head, or 37.9 per cent of the total, and all others bought 5,418 head, or 5.9 per cent of the total. As explained before, these figures are not exact, because the cattle bought by the shippers are simply those that showed on the account of sales as being for shippers—which we know to be shippers. Those bought under the Wilson & Company name are all included under the packers, so that I think that the division there should probably be about 52 or 53 per cent bought by the packers, and 41 or 42 per cent bought by the shippers, and the rest almost entirely bought by local butchers who buy from time to time heavy and light grades of better beef. Small packers like the Illinois Packing Company and the Chicago Packing Company, buy quite a good deal of light-weight cattle for their Chicago trade.

Member: May I ask a question here for a minute?

Mr. Harlan: Yes, sir.

Member: Of those cattle that were shipped, what per cent of them were purchased by men not employed by the packers?

Mr. Harlan: I have never been able to get the exact figures on that. I tried to work that out from time to time to find out how much the packers buy, and it is rather difficult, but I would say that of the cattle shipped, perhaps 80 per cent are bought by the packers' shippers—that is, by the United Dressed Beef and the New York Butchers, and a few by Wilson under the name of Shoemaker, and by the Morris interests, and the rest were bought by the independent shippers, like Egan, and some are bought direct under the name of Dual Packing Company or the Pittsburgh Packing Company. Of the choice cattle that they bought, I don't think they bought over 15 to 20 per cent, and I doubt if they buy that much of them.

Member: Fifteen years ago the per cent shipped out of the yards was about the same as it is now, and they were all purchased by outside buyers, and we discover now that we have practically the same per cent shipped out, but only a small per cent being bought by Egan and a few others is worth mentioning.

Mr. Harlan: It shows the extent to which the handling of beef cattle is concentrated in the hands of the large packers or the subsidiaries that they buy cattle for.

Of the good steers, of course, it might be useful to try to explain just what is the difference between a choice, medium and good steer, but I will admit it is rather difficult. In a general way, I would say that no steer is considered choice unless it would dress out above 60 or 61 per cent of dressed beef, and then it would have to be of a certain quality or finish to be considered choice. Good steers dress out from about 58 to 60 or 61 per cent and upwards, and medium steers would dress from 55 to 56 or 58 per cent; but the quality would have something to do with it in either case. A good many steers might dress out 58 or 59 per cent, but on account of quality would not be considered better than the medium steers.

Of the "good" steers, receipts of which we have recorded show about 171,000, and of those 140,521 were heavy and 31,257 light. Of that amount Iowa furnished 84,707, or 49.4 per cent; Illinois furnished 52,668 head, or 31.3 per cent; Missouri, 12,958, or 7.5 per cent; Nebraska, 5,076, or 2.9 per cent; South Dakota, 3,744, or 2.2 per cent; Indiana, 6,263 or 3.6 per cent and all other states, 5,342, or 3.1 per cent. These other states, I would say that almost all of these good steers in here came from—there were a very few came from Ohio, but nearly all of them came from the Mineral Point section of Wisconsin, and came in during the last two months or two and a half months.

"Medium" steers have 192,253 head, of which Iowa furnished 96,253, or 50.1 per cent; Illinois, 49,550, or 25.8 per cent; Missouri, 23,514, or 12.2 per cent, and other states 22,936, or 11.9 per cent. We kept the record of those steers only from those three states, and then lumped them all up together, which makes 11.9 per cent.

Choice steers make up 4.4 per cent of the total, and 14.1 per cent of the steers. Good steers make up 26.4 per cent of the steers and 8.3 per cent of the total. Medium steers make up 9.2 per cent of the total and 29.5 per cent of the steers.

With regard to these percentages, the percentage that each grade bears to the total number of beef steers can be considered as fairly exact. Of course, this percentage of the total receipts of cattle is not exact, as I have explained, because we haven't been able to gain access to all of the accounts sales, so that we haven't had an entire record of all the cattle.

Here are the other two grades of cattle of which we kept a record—"common" steers and "cheap" steers:

COMMON STEERS.

Total, 131,674.

	No.	Pct.
Iowa	55,083	41.9
Illinois	31,519	23.9
Others	45,072	34.2
Packers	41,096	31.2
Shippers, local butchers, stockers and feeders	34,500	26.2
Others	56,078	42.6

CHEAP CATTLE.

Total, 63,612.

Iowa	16,943	26.6
Illinois	7,751	12.2
Others	38,918	61.2
Packers	4,484	7.0
Shippers, local butchers, stockers and feeders	14,865	23.3
Others	44,263	66.5

The common steers are the poorest kind of carcasses which are sold as dressed beef. After they get below that they are sold mostly as cutters and canners or as boners.

Receipts of common cattle totaled 131,674, of which Iowa furnished 55,083, or 41.9 per cent; Illinois, 31,519, or 23.9 per cent, and all other states, 45,072, or 34.2 per cent. In these two grades I kept a record of only Iowa and Illinois and lumped the other states together.

Now you notice that of the common steers, the packers bought about 31.2 per cent, and here, instead of including shippers exclusively, I have changed the form a little bit and included not only shippers but local butchers, and that means all cattle slaughtered outside of the packers' beef, and that makes about 26.2 per cent, and the stocker and feeder buyers and others buy 56,078 head, or about 42.6 per cent.

Of these cheap steers—the cheapest kind—Iowa furnishes 16,943, or 26.6 per cent; Illinois, 7,751, or 12.2 per cent, and all other states, 38,918 head, or 61.2 per cent, and I would say that "others" here means very largely Minnesota, Wisconsin and Michigan, and what come into the market from other markets, especially from St. Paul; but of these cattle the packers buy only about 7 per cent; shippers and local butchers, 23.3 per cent, and stockers and feeders and others buy about 66.5 per cent. So that the market for this grade of cattle is made by the stocker and feeder buyers and not for slaughtering purposes.

In order to show the distribution of these cattle as they come to market from month to month, the total supply of choice cattle received during those eight months is shown in these charts, which I now place before you:

CHOICE CATTLE.

44 per cent of total.

		4,448	
April, 14 per cent	12,877	5,316	
		3,060	
		3,451	3,172
May, 15.1 per cent	13,921	3,064	
		3,541	
		3,285	6,656
June, 25.4 per cent	23,419	4,637	
		4,798	
		5,214	2,346
July, 15.8 per cent	14,570	3,023	2,529
		3,501	
		2,853	3,067
August, 14.1 per cent	12,987	2,842	
		2,788	
		2,112	1,663
September, 8.7 per cent	7,993	1,415	
		2,660	
		1,580	891
October, 4.7 per cent	4,308	1,753	480
		1,184	
		502	421
November, 2 per cent	1,972	389	
		414	

Of the total supply of choice cattle received during those eight months 12,877 reached the market during the month of April, or 14 per cent; 13,921 in the month of May, or 15.1 per cent; 23,419 in the month of June, or 25.4 per cent; 14,570 in the month of July, or 15.8 per cent; 12,987 in the month of August, or 14.1 per cent; 7,993 in the month of September, or 8.7 per cent; 4,308 in October, or 4.7 per cent, and 1,972 in November, or 2.1 per cent. That shows how, under the present system of marketing, those cattle came into the market during the past eight months—of choice cattle.

These smaller figures here show the distribution each week within the month. That is, in the month of April there was no market the first week in April, on account of the stock yards strike, and very little the second week on account of the railroad strike, but in the three weeks receipts were about as I have shown here, and it gives some idea as to how they came to market as to months and as to the week within the month.

Of the good cattle, as far as the percentage of the different months is concerned, it is very much the same as shown with reference to choice cattle.

GOOD CATTLE.

8.3 per cent of total.

April, 16.4 per cent	28,180	5,618 13,125 8,917	
May, 26.7 per cent	45,893	11,338 13,380	13,011 7,242
June, 16.2 per cent	27,715	3,711 3,902	6,475 7,990
July, 13.2 per cent	22,681	6,947 4,836	6,776 5,896 3,863
August, 9.8 per cent	16,827	3,843 3,343	3,326 3,353
September, 5.9 per cent	10,105	4,315 2,339	3,165 1,755
October, 4.6 per cent	7,986	1,502 1,981	2,507 1,636 1,830
November, 7.2 per cent	12,373	2,693 1,285	3,109 2,590

As you will see from the chart, April receipts were 16.4 per cent; May, 26.7 per cent; June, 16.2 per cent; July, 13.2 per cent; August, 9.8 per cent; September, 5.9 per cent; October, 4.6 per cent, and November, 7.2 per cent. You see here in November, while the receipts of choice cattle declined progressively each month from June, the supply of good cattle was the same until November, and then it suddenly jumped up to 12,373.

MEDIUM CATTLE.

29.5 per cent of steers; 9.2 per cent of total.

April, 14.7 per cent	28,411	4,800 13,393	9,573
May, 22.4 per cent	43,105	10,168 10,583	10,211 10,807
June, 12.9 per cent	24,896	4,623 4,303	5,924 5,161
July, 11.5 per cent	22,033	6,547 4,632	6,485 4,816 4,438
August, 13.3 per cent	25,618	6,089 5,405	6,482 4,684

September, 7.3 per cent	13,908	4,399	3,625
		3,653	3,164
			3,359
		2,025	2,130
October, 5.3 per cent	10,245	1,906	2,842
		3,923	8,086
November, 12.5 per cent	24,037	6,314	3,312

Medium cattle receipts were much the same so far as percentages were concerned, but you can not keep a record of these medium cattle so well, or to show the influence of receipts on prices, because when you get into this class of cattle in the fall of the year they come more or less in competition with the western cattle, and these two classes of cattle are influenced according to the demands of beef and grades of cattle, and so the beef came in competition with the western cattle, and when western beef is good, competition between this class of cattle and western cattle is very keen, and it will break the price on these cattle down to practically the level that western beef cattle are selling for.

The receipts in this class were: April, 28,411, or 14.7 per cent; May, 43,105, or 22.4 per cent; June, 24,896, or 12.9 per cent; July, 22,033, or 11.5 per cent; August, 25,618, or 13.3 per cent; September, 13,008, or 7.8 per cent; October, 10,245, or 5.3 per cent, and November, 24,037, or 12.5 per cent.

COMMON STEERS.

		2,053	7,388
April	19,092	9,357	
		5,213	4,985
May	22,491	8,081	3,750
		3,174	3,157
June	16,407	3,216	3,880
	11,955	4,538	2,382
July		2,239	2,839
			2,937
		2,478	4,452
August	16,255	2,257	4,823
		3,352	4,151
September	14,430	2,879	4,128
		2,164	3,908
October	11,957	1,861	2,314
			3,874
		5,744	4,421
November	19,077	4,837	2,299

This last chart of common steers, I have not carried the figures into percentages, but you can see there was no such variation in the receipts of these steers as there has been in the other classes—the largest receipts for the eight-months period having been some 22,000 in May, and the smallest was just short of 12,000 in October; so that from this chart you can see that this class of stock has come to market more uniformly during the eight-months period than the other three grades of cattle.

(Exhibiting charts of curves.)

These charts here could be understood better if they were attached together, because they are supposed to be continuous charts showing by these lines, the red line and the blue line, the daily fluctuations in the price of good steer beef. The red line shows the fluctuations at Chicago; the blue line shows the average of the fluctuations at the three eastern markets—Boston, Philadelphia and New York. These are the daily fluctuations in price of good and choice steers. The blue line is the price range of good steers, and the yellow of choice steers. This yellow column here shows the weekly receipts at Chicago of choice steers; the blue, the weekly receipts of good steers, and the red is the weekly receipts of all cattle, and the black column is the weekly receipts of all cattle at seven markets. These are on different scales. That is, the scale for the good and the choice is on variations of 1,000, and so on, variations of 5,000, and on up to variations of 20,000.

Starting at the close of the stock yards strike in Chicago last spring, you will remember the course of the market at that time. As soon as the market opened at that time after the strike, there was quite an advance in cattle, which was followed by very large receipts for the three weeks in April, which broke the price downward to about 11½ to 14 cents, which was the range on good and choice cattle. This chart shows how the beef market fluctuated at that time. The supply of beef was cut off temporarily in the east and Chicago for a while, and the market advanced quite rapidly, and then declined just about as rapidly, and as you go over into May you will see that the price of cattle continued to sag gradually until you reach the last week in May, when it reached practically the lowest level of the spring decline. This doesn't exactly show how low that level was, because, as a matter of fact, medium cattle, good cattle and choice cattle were in such large supply and the price for the cattle in different sections of the yards on different days was so various, that it was hard to classify cattle as to whether they were good, medium or choice; they were selling almost in bulk; so that on this chart it shows the top round about $13.60 for choice cattle, but as a matter of fact, I don't think there were any sales that ran over 13 cents, and the big bulk of those cattle were around 11 and 12 cents, and medium cattle didn't break much below 10 cents, so that the range between choice and medium cattle wasn't over $3 a hundred.

The receipts of these three classes were running about 14,000 this week, about 16,000 this week, over 16,000 this week, and the last week of May the receipts of all cattle in these three classes of cattle fell off very markedly from 10,000 down to 4,700, and then the next week in June there was a falling off of receipts of cattle, and then the beef market advanced very rapidly, and the cattle market advanced almost as rapidly, but not in proportion.

As I stated before, in the three eastern markets, the price of western dressed beef reached the highest point on record, but as the chart shows, it stayed there just a few days and then dropped almost as rapidly as it had advanced.

These three months here after the first of July, the beef market fluctuated more or less during July, but tended to reach a level which western dressed beef was selling at in Chicago and the three eastern markets, at 23 to 25 cents, and the receipts of these two grades of cattle became fairly uniform week by week. The week following the Fourth of July, they advanced a little, and the market declined some, but after the second week in July the receipts ran fairly uniform clear thru July and August and well into September. You can see there was very little fluctuation in the price or the range of prices during that month—or those two months and on into September—and the price of dressed beef was fairly uniform, with a few fluctuations at different markets, but within a range of about a dollar. After we come into September, the beef market begins to fluctuate more, but the receipts of these cattle are declining continuously. We have 6,000 this week, about 3,700 this week, 5,000, 3,200 and 3,000, but at the same time the receipts of choice cattle were—the demand for that class of beef was sufficient that the price of the cattle advanced from about $17.25 the first of August to about $18 the last of August and reached the highest point, $18.35, in September—reached the highest point of the fall, $18.50, in October.

You see the receipts of these classes of cattle are declining continuously until the last week in October, when there were less than 500 received of choice cattle in one week, but after the market reached $18.50 it gradually declined with a few recoveries until we get down to about an $18 top, but at the same time the market for dressed beef, for good star beef in the east, began to weaken about the middle of October and began to fall away with some recoveries on into November. After the first week in November it began dropping and dropping and dropping until the last week in November, when it was selling on the range in the three eastern cities at 16½, 17 and 18 cents. In spite of pretty good receipts of choice and good cattle, the whole market went down with it, so that at the end of November we had these cattle selling on a range from 11 cents as the bottom on good cattle and 15½ on choice cattle, with an increasing spread all the time. It is apparent both from the chart of the prices of beef and the movement of cattle prices during this time that the price of this class of cattle was simply maintained during the month of October and November because the receipts had fallen off to such small numbers. If there had been anything like a large supply of cattle during these two months, the price would have declined much sooner, and the decline would have been much greater than it was.

WEEKLY RATIOS.

May	1.00 to 1.25	1.00 to 1.15
	1.00 to 1.15	1.00 to 1.10
June	1.00 to 1.08	1.00 to 1.26
	1.00 to 1.13	1.00 to 1.27

July	1.00 to 1.21	1.00 to 1.15
	1.00 to 1.19	1.00 to 1.14
		1.00 to 1.10
August	1.00 to 1.13	1.00 to 1.13
	1.00 to 1.12	1.00 to 1.14
September	1.00 to 1.11	1.00 to 1.11
	1.00 to 1.10	1.00 to 1.12
October	1.00 to 1.07	1.00 to 1.08
	1.00 to 1.09	1.00 to 1.00
		1.00 to 1.09
November	1.00 to 1.09	1.00 to 1.05
	1.00 to 1.12	1.00 to 0.97

These two charts are an attempt to show something about what has been the weekly ratio between the market value of a good steer, or of good steers, and the market value of resultant products, based on steers dressing out 60 per cent of good beef, and based on a test of some forty-seven cattle averaging about 1,400 pounds. Now, according to that test the beef production of the dressing yield was about 60 per cent, there was a yield of about 5 per cent of cured packer hides, of about 6 per cent of tallow, about 5 per cent of edible by-products, and about 6 per cent of inedible by-products. Taking the 100 per cent as representing the whole steer, you have 60 per cent beef, 5 per cent hide, 6 per cent tallow, 5 per cent edible by-products, and 7 per cent inedible by-products. Figuring those at the weekly range of average top good steers, and the weekly range of average top good steer beef, you will find that the average top of good steer beef was 19 cents, the packers hides were 36 cents, the average price of tallow (which is the average edible tallow called Packers No. 1) was 13½ cents, and setting an arbitrary price of 10 cents a pound on edible by-products and 5 cents on inedible by-products, gives a total of $14.85. The average price of good steers during that time was $13.75. So that you have $13.75 representing the price of steers and $14.85 representing the price of the products; or, taking the ratio out of them, it represents a ratio of 1.00 to 1.08. That is, that the products were selling at about an advance of 8 per cent over what the animal was costing on the hoof.

I computed that for the various weeks just to try to find out what the actual result, in a general way—what has been the actual result of the packers' operations with regard to one class of cattle. This should not be taken as representing profits of the packers, because it doesn't do anything of the kind, because the figures are too indefinite and too uncertain; but simply as using the same method from week to week it does show something as to what the variations in those ratios have been; but during May—and May is the month we are after—where the price of different entries of cattle were fluctuating quite rapidly, we have a ratio of 1.00 to 1.25 the first week, 1.00 to 1.15 the second week, 1.00 to 1.15 the third week and 1.00 to 1.10 the fourth week. In June we have 1.00 to 1.08, 1.00 to 1.13, 1.00 to 1.26 and 1.00 to 1.27; July, 1.00 to 1.13, 1.00 to 1.15, 1.00 to 1.19, 1.00 to 1.14 and 1.00 to 1.10; August, 1.00 to 1.13, 1.00 to 1.13, 1.00 to 1.12 and 1.00 to 1.14; September, 1.00 to 1.11, 1.00 to 1.10, 1.00 to 1.11 and 1.00 to 1.12; October, 1.00 to 1.07, 1.00 to 1.09, 1.00 to 1.08, 1.00 to 1.00 and 1.00 to 1.09; November, 1.00 to 1.09, 1.00 to 1.12; 1.00 to 1.05 and 1.00 to 0.97. As you will notice, in the last week in November it ran down to 1.00 to 0.97, which indicates on that kind of ratio that we are not getting as much out of the beef and by-products as they were paying for the cattle.

That is the conclusion I reached some time ago, and as a result of the discussion between the different members of the two organizations, it was thought perhaps desirable that something ought to be done along the line of trying to arrange or perfect an organization which might give feeders of cattle a better control over the industry, both over the collection and the distribution, and for that purpose there was a meeting of the directors of the Corn Belt Meat Producers' Association held in Des Moines about two months or two and a half months ago, and I made a report at that time as to what I thought might be accomplished, and the direction which such an organization should work, or along what lines it should be made, and preliminary to that I considered the question as to how the cattle industry could be handled, considering it simply as a manufacturing industry, whether it could be put on a manufacturing or industrial basis, as others are, whether the price should be made by the industry or part of the industry that puts the product into consumption, or whether it should be made on the initiative of the feeders themselves. Under present conditions of the industry, the feeders have to take their chance with the market after the stuff is produced, and it is fairly plain to all of us that it is not on a strictly manufacturing basis—that is, letting the men produce the cattle under contract from the men who distribute the product, and it is plain that any action toward an organization should be along the line of giving the producers a better control over the production and the distribution of the product, and not along the line of trying to put the industry on a strictly manufacturing basis. So at that time a sub-committee was appointed to try to draw an outline for some such organization as could undertake to control the distribution and in a way the production of these different classes of cattle, and they finally shaped up rules and regulations for such an organization, and Mr. Wallace will present the result of their deliberations to you this afternoon.

Now, just one announcement, I am supposed to appoint a committee of three men to meet with a like committee of the Cooperative Live Stock Shippers' Association of this state to determine whether or not it is advisable to have a joint session of these two organizations in 1921—that is, in their annual meetings. I have appointed as members of this committee George E. Morse, of Eldora; R. A. Lenocker, of Dexter, and F. J. Bauer, of Payton.

CORN BELT CATTLE FEEDERS' CO-OPERATIVE ASSOCIATION.

Now we will listen to Mr. Wallace's report of the sub-committee.

Henry C. Wallace: As Mr. Sykes said, this report of Mr. Harlan's will be open for discussion tomorrow. I think we ought to say this about Mr. Harlan's work: Last winter the directors felt we had been fussing along long enough without adequate knowledge of live stock conditions at Chicago and other markets, and we decided to simply put Mr. Harlan there to study these things and collect these basic facts he has presented today, on the theory that until we had those we could get nowhere. We had been consulting and complaining and resoluting for forty years and were no further ahead today than we were then, except as we gathered this data. The Farm Bureau has joined with us in paying the expense and we feel that with the work which has been done there, and which will be completed about March 1, we have got something definite to work on, we will have some ammunition in the way of real information. And, of course, it just depends upon what sort of use we are going to make of that—if we know enough to use it intelligently we will get somewhere, and if we do not we will not get anywhere.

Of course, I am not a member of the committee; they asked me to present the report to you with the thought that instead of reading it all, I can condense it somewhat as I go along and get thru more quickly.

This report is the report of the sub-committee appointed by the directors at a meeting held about six weeks ago. The sub-committee consisted of Mr. Cessna, Mr. Mott, Mr. Sykes, and acting with Mr. Harlan. They made the report to the directors, and the directors considered it last night. We had it printed and in the hands of the directors several days before the meeting, and as a result of the meeting of the directors last night we bring it before you with the suggestion that it have favorable consideration.

It is not supposed that this is exactly the form that it ought to be when finally passed up, as some changes may be made here and there, but the general thought is it is about as it will be.

Article 1—Name—Place of Business.

Section 1—This association shall be known as the Corn Belt Cattle Feeders' Co-operative Association. Its principal office shall be at the Union Stock Yards, Chicago, Illinois.

Article 2—Objects.

Section 1—To unite into a single body the cattle feeders of the corn belt states for co-operative and concerted action, to the end of putting the cattle feeding business on a sounder financial, industrial and economic basis.

As Mr. Harlan showed you, over 75 per cent or 80 per cent of the cattle that go into the Chicago market come from these two states. The purpose is to bring the feeders who send those cattle into an organization which will represent the majority of fed cattle that go to the Chicago yards.

Section 2—To provide the means and establish such agencies as are necessary for the development and maintenance of an efficient and economical system of production and distribution of grain-fed cattle.

Section 3—To collect and disseminate information among its members relative to conditions, both actual and prospective, of the markets for such cattle and for the raw materials from which such cattle are made; also as to the conditions of production, such as the number and kinds on feed in different sections, numbers to go on feed, the probable numbers to be ready for market at different periods, etc., in order that members may have as full information as possible as to conditions in the industry.

Section 4—To collect or assist in collecting accurate information as to the daily, weekly and monthly receipts of these and other kinds of cattle by grades and weights at various markets, and to keep full and accessible records as to prices, states of origin, buyers, final disposition, etc., in order to build up dependable statistics for use in directing the operations of members

Now, the words "to build up dependable statistics for use in directing the operations of members" means to build up a statistical organization which will give you the information you have got to have in order for you to feed intelligently.

Section 5—To make or have made numerous and representative tests as to the costs of producing such cattle under various conditions of seasons and methods and under changing costs of feeding cattle, feeds, labor, interest, insurance, freight, etc., to be available for the use of members in comparing and modifying their methods and results and as a basis for determining the reasonable production costs under average conditions.

> Section 6—To collect or assist in collecting all possible information as to the consumption of the beef and by-products of the different grades of cattle and as to the prices of these products; to study the channels thru which different grades of beef and especially the better grades, are distributed, to determine the normal seasonable demands and the industrial and financial forces that modify these demands in order to make possible estimates of the probable consumptive demand over a given period of time, and to keep a continuous record of such information for statistical purposes and to give it out to members from time to time for their guidance.

In other words, the market is largely influenced by business conditions and industrial conditions. The purpose is to study those conditions, to anticipate them as far as possible.

> Section 7—To maintain agencies at different markets and elsewhere for the purpose of buying feeding cattle upon orders from members and to collect all available information as to the supply and movement of such cattle.

The purpose is to know how many are going out into the country every month; how that number going out this fall, for example, compares with the number going out last fall or the year before, and its relation to the probable demand.

> Section 8—To develop a financial organization for the purpose of securing funds to finance the purchase of feeding cattle and to make directly available to members the credit facilities and interest rates of the federal reserve banks.
>
> Section 9—To work for the best conditions and services in transportation and thus enable members to secure cars promptly and assure them of the expeditious movement of their stock to market with decent accommodations and courteous treatment for the shippers en route.
>
> Section 10—To undertake to prevent or to have revised all unfair and unreasonable charges for feeds, yardage, handling or selling, either en route or at the market.
>
> Section 11—To maintain a traffic department for the adjustment and collection of all reasonable claims of members against transportation, handling or selling agencies.
>
> Section 12—To work with governmental agencies and other interests in the industry, to establish, maintain and make widely understandable, dependable and readily determinable grades for different classes of fed cattle.
>
> Section 13—To correct trade evils and abuses by discouraging all customs and practices not in accordance with sound business principles.

Section 14—To teach the principles of true co-operation and to cultivate by all possible means a spirit of co-operation among members.

Section 15—To develop amicable and mutually appreciative relations with other interests in the industry in order to facilitate the securing of desired information and to the end that all may work together to put the feeding industry on a more secure basis.

The idea is not to fight anybody, the railroads or the commission men, the packers or anybody else, but that we are all a part of a great big cattle industry and that it is the hope of all of us to conduct that industry economically from the time cattle are fed until the meat is placed on the consumers' table.

Section 16—To establish selling agencies for the handling of the cattle of members at the markets whenever it is decided that the present agencies are not performing the function efficiently or at a fair remuneration or it is probable that such an agency can improve the service or reduce charges.

Article 3—Membership.

Section 1—Membership in this organization shall be open to all persons directly engaged in the feeding of cattle for market in the corn belt states, and shall be limited to such. In order to be a member each person must also be a member of such local or subsidiary organizations as shall be effected for administrative and other purposes, must agree to abide by the by-laws and regulations of both this and such local organizations, and must sign a producer's agreement in such form as may be adopted.

Article 4 provides for the fiscal year to run for the calendar year, and provides for the notice of meetings.

Article 5—Quorum.

Section 1—Fifteen per cent of the regularly qualified representatives in good standing shall constitute a quorum for the transaction of business at any meeting.

Article 6 provides with reference to the representation at the annual meeting. It is not necessary to deal with that now.

Article 7—Officers.

Section 1—The officers of this association shall consist of a president, a vice-president, a secretary-treasurer, a manager and a board of directors of eleven members. The president and vice-president shall be ex-officio members of the board of directors.

Article 8—Election of Officers.

Section 1—The president, vice-president and seven directors shall be chosen at the annual meeting. Nomination and election shall be by ballot. Two directors shall be appointed by the president of the American Farm Bureau Federation. The United States Department of Agriculture may appoint a consulting director, with all rights of other directors except that of vote.

Section 2—The term of office of the president and vice-president shall be one year, commencing January 1 immediately following the annual meeting.

Section 3—The term of office of members of the board of directors shall be two years; four members shall be elected in even-numbered years and three in odd-numbered years; except that the term of three members of the board elected at the first annual meeting shall be one year only.

Section 4—The board of directors shall meet within ten days after the first annual meeting, and after successive annual meetings, and shall elect a secretary-treasurer and a manager, who shall not be members of the board, and who shall serve until their successors shall have been elected and have qualified.

Section 5—Any vacancy on the board of directors shall be filled for the unexpired term by the board.

Section 6—A majority of the board of directors shall constitute a quorum at any meeting.

Article 9—Duties of the Board of Directors.

Section 1—The board of directors shall determine the policies, and, thru its executive committee, control and direct the affairs of the association and make all necessary rules and regulations to this end, not inconsistent with these articles.

Section 2—The board shall fix the compensation of the officials selected by it, and shall have authority to remove or dismiss them for cause at any time.

Section 3—The board shall require all officers or agents or employes of the association who are charged with the custody or handling of the funds or property of the association to give bonds in a suitable amount.

Section 4—The board shall meet regularly every six months at such dates as it shall establish, at the head office of the association, and special meetings shall be held upon the call of the president, and shall be called by him upon the written request of three members of the board.

There are some further articles here that are not necessary to read at this time. You will all be given a copy of this.

Article 10—Duties of Officers.

Section 1—The officers of the association shall perform the usual duties of their respective officers under such regulations as the board of directors may fix.

Article 11—Membership Fee—Finance.

Section 1—The membership fee in this association shall be ten dollars, which shall be used for the purpose of perfecting the organization and for working capital. All future and additional revenue shall be secured by a fixed charge per head upon cattle fed and marketed by members of the association as determined by the board of directors, but not to exceed twenty cents per head, and by fixed charges per unit or per cent on feeding cattle and other supplies purchased for members.

Section 2—The operations of the association shall be carried on as nearly as possible on a non-profit basis; such surplus as may be accumulated shall be added to the working capital of the association until the same shall have reached the sum of fifty thousand dollars. Thereafter the charge per head shall be reduced until it no more than pays operating expenses from year to year; in years when receipts are in excess of this amount, such excess shall be placed in a special surplus fund and used for the payment of deficits of other years.

Article 12—Contracts and Agreements.

Section 1—Each member shall enter into a written contract with this association in such form as the board of directors shall require, subject to the following conditions:

(a) Such contracts shall run continuously unless canceled by either party according to the terms thereof.

(b) Each member shall agree to furnish the association all required information as to his feeding activities, actual or proposed, such as numbers on feed, kind, weight, proposed term of feeding, expected date of marketing, etc.

(c) Each member shall appoint the association his agent to purchase or have purchased for him all feeding cattle in so far as these are purchased at the central markets, or elsewhere, where the association maintains a purchasing department, and shall agree to pay the established charges therefor.

That is, the markets where the association has set up a purchasing department.

(d) Each member agrees to report immediately to the association all feeding cattle purchased elsewhere, with a description of the kind, weight and price.

The idea being that the association must have full information as to what every member is doing, the number of cattle, when he got them, what he is going to do with them, and when he expects to market them, and where.

(e) Each member agrees to designate specific months in which he will market his cattle, and during such months he agrees to market them on days selected by the association.

> (f) Each member agrees that in the event the numbers preparing for any month or months are such as to over-run or underrun the probable demand for those months, that he will change his feeding plans so as to market his cattle during such months as the association shall designate.

In other words, the association has got the information as to the number of cattle on feed; it has got men studying the conditions which demand consumption, and if the association finds that there are too many cattle coming in the month of June, say, and the cattle planned to come in that month are going to flood the market, then the association will notify the members to change the supply to make the number of cattle coming in comparable to the supply and demand.

> (g) Each member agrees that if and when the members of the association shall vote to establish a selling agency for handling fed cattle at the central markets and elsewhere, he will appoint such selling agency his sole agent to sell his cattle. But until such agency is established each member shall be free to select his own selling agent.
>
> (h) Each member agrees to authorize such selling agents as shall sell his cattle to deduct from his returns and pay to this association the established rate per head for the benefits derived by him.

Article 13 applies to local associations; provides how they shall be organized and who shall be members.

Article 14 deals with the expenses and payments.

> Section 1—All expenses of operation of this association shall be met by a fixed charge per head on the cattle fed and marketed by the members, whether shipped to the central markets or sold elsewhere, and by a fixed charge per unit or per cent on cattle or supplies purchased thru the buying department.
>
> Section 2—This fixed charge per head shall be paid directly by the selling agent of each member to the association, and each member's contract shall be understood to be an order on his selling agent to pay this charge out of the proceeds of the sale.

Article 15—Savings and Profits.

> Section 1—After the year's expenses have been paid and an adequate amount set aside to cover depreciation of property and a special reserve set aside to cover unforeseen or extraordinary expenses during the coming year, any balance shall go to a special permanent reserve fund, and the per-head charge reduced for the following year to an estimated amount to just cover operating expenses, any resulting deficit to be paid out of this reserve fund.

I will not take the time to read article 16, which provides for the accounting and auditing of the affairs of the association.

Article 17 provides for amendments.

Now, of course, you can not put a scheme of that sort across without an agreement, a definite and legally binding agreement, and here is the agreement suggested by the committee:

> This agreement, made and entered into at ———, on the ——— day of ———, A. D. 192—, between the Corn Belt Cattle Feeders' Co-operative Association, a co-operative organization incorporated under the laws of the state of ———, and having its principal place of business at Chicago, Illinois, (hereinafter called the association), and ———, a member of said association, of ———, in the county of ——— and state of ———, (hereinafter called the producer);
>
> Witnesseth, that for and in consideration of the outlays incurred and to be incurred by the association in securing information of the production and consumption of fed cattle and their products, gathering data of supplies and market demand, as well as of the movement and prices of such cattle, in providing agencies and facilities for the purchase of feeding cattle, including the expense to which it has been put in studying market conditions and in developing new methods of distribution, and in further consideration of the mutual obligations of the respective parties hereto, it is hereby agreed as follows:
>
> 1. That the producer appoints the association his agent for the purpose of purchasing his stocker and feeder cattle whenever such cattle are purchased at public markets at which the association maintains a purchasing agency.
>
> 2. That the producer will prepare his cattle for market under the direction and advice of the association to the extent of distributing his production of different kinds and classes over different months as he may be instructed to do by the association.
>
> 3. That the producer will furnish the association with full and complete information as to his current and proposed operations in such form and at such times as the association may require.
>
> 4. That the producer, in advance of starting any cattle on feed, will notify the association of his intention so to do, together with full information as to his proposed operation.
>
> 5. That the producer will change his plans of activities upon the advice of the association as the latter may decide that production for any given period promises to be excessive or deficient.
>
> 6. That the producer, having himself set or having agreed to determined months in which he will have ready for market specific lots of cattle, agrees to forward such cattle to market on such days of said months as the association shall direct.

7. That whenever the association in regular or special meeting shall decide, and this decision shall have been ratified by a majority of all the members of the association at a special referendum, to set up selling agencies of its own to sell cattle at the central markets or elsewhere, and shall have done so, the producer shall appoint and hereby does appoint such selling agency as his sole agent in marketing his cattle; provided, that until such selling agencies are established, the producer shall be free to select his own selling agency.

8. That the producer will pay the association its regular charge, which shall be a fixed amount per head on all cattle fed, as determined by the board of directors of the association, and which shall be sufficient to pay all expenses of rendering such services, but shall not exceed twenty cents per head; and the producer hereby authorizes and directs his selling agency or commission firm which sells or shall sell his cattle to pay the charge out of the proceeds of such sales.

9. That the producer shall give his promissory note for one hundred dollars, without interest, payable to the association on demand, which shall be a guarantee that he will fulfill the terms of this contract; that in the event that the producer wilfully neglects, fails or refuses to carry out the terms of this contract, and after written notice from the association shall continue to neglect, fail or refuse so to do, then the association may proceed to collect the amount of said note, and such collection is hereby authorized by the producer and the said amount is hereby recognized by him as due the association as liquidated damages for his failure to fulfill the terms of this contract.

10. That either party may cancel this contract on the 1st day of December of any year after January 1, 1922, by giving notice in writing to the other party at least thirty days prior to said December 1. Upon such notice, the producer shall pay all indebtedness of any kind due by him to the association, and shall deliver his copy of this contract to the association by mailing it to the head office of the association, and the same shall there be canceled. Upon the cancellation of said contract, the association shall return to the producer his guarantee note.

11. This contract remains in effect indefinitely unless canceled as provided in Section 10 of this contract.

12. This contract shall not go into effect until similar contracts have been signed by at least ——— other producers.

In witness whereof, the said parties have executed this contract in duplicate this ——— day of ———, A. D. 192—.

The Corn Belt Cattle Feeders' Co-operative Association.

By ....

....

Producer.

Now, there are two or three things that will probably have to be changed. First, with regard to the exact phraseology of this contract, which is not in final form, of course. The matter first needs to be examined as to its legality and enforcibility, and no doubt there are many things that should be changed. The one thing to be considered by the members here is whether the plan, the general plan, is feasible, whether we have reached the time when you are willing to tackle it. I think if you didn't catch it when the reading was made, you will when you come to read it carefully, and you will find that the members of this association to a very considerable extent give up their own individual rights to the rights taken over by the association of which he, of course, is a member. Unless this is done, of course, the whole plan amounts to nothing. In this time of much talk about advisory committees to regulate, to stabilize markets—we know that all that is bunk, and we might as well admit it frankly. If we are going to get anywhere in adjusting production to consumption, in adjusting production problems, you have got to do it thru a legally enforcible agreement by which we get together and put our interests in a common pot which we will control ourselves. That is the one thing to be considered, whether the time has come when the feeders of the corn belt are willing to tackle that job.

If you will notice Mr. Harlan's figures, you will see that Iowa and Illinois dominate the Chicago market. It has been estimated that if 7,500 cattle feeders in Iowa, Illinois, northern Missouri and eastern Nebraska signed up this contract and stayed by it, they will absolutely dominate the Chicago market—and probably 5,000 would do that. Experiences of other organizations have shown in order to be successful we have got to organize on a commodity basis. When you look over the whole field and find the small number of men who produce the fed cattle, it is about as easy a group to organize as you can find. That is, the number is relatively small.

We have copies of this which we desire that the individual members should get before we adjourn. Let's be prepared to discuss this tomorrow. We haven't time to discuss it now, because we have to get out of this room in a half or three-quarters of an hour, and because of other engagements we have to hear one or two people whom we planned to call on tomorrow.

The President: Gentlemen, it is very unfortunate that we are so hampered for time. There are two or three speakers whom we planned to put on the program for tomorrow who must leave tonight, Mr. Thorne and Mr. Coon both being of that number, and to hear them necessitates our deferring this discussion upon this very important matter that Mr. Wallace has just presented to you until a later time, and taking the time that we should have spent on this organization plan and giving it to some of these other speakers, so that at this time I am going to ask Mr. Coon to speak for a few minutes on the question of claims.

RAILROAD CLAIMS.

By Owen L. Coon, Claim Attorney, Chicago, Illinois.

Mr. Chairman and Gentlemen of the Corn Belt Meat Producers' Association: When we think of the railroad claims, it may be interesting to some of you to know that in the year 1914 the railroads of the United States paid out $31,000,000 satisfying freight claims. In 1919 they paid out more than $101,000,000 in satisfying freight claims, an increase of 300 per cent in less than six years. It may also be interesting to you to know that in the year 1909 there arrived at the five principal terminal markets in the United States—namely, Chicago, Omaha, Kansas City, St. Louis and St. Joseph—more than 100,000 dead cattle, hogs and sheep, and 77,000 cripples. Think of it! By exact figures, 101,447 dead cattle, sheep and hogs and 77,177 cripples.

It may also be interesting to you to know that in 1919 there arrived at Sioux City over 10,000 dead and crippled animals in 68,000 cars, and that in St. Louis last year there arrived 29,000 dead and crippled animals out of 110,000 cars. You can readily realize the tremendous loss that the live stock industry is suffering as a result of these losses.

Your association has established a railroad claim department in Chicago, in connection with the Farm Bureau Federations of Iowa, Ohio and several other states, and the farmers of the National Grain Dealers' Association, to look after these claims for their members, and to see that they are more thoroly handled and that your interests are protected. One of the purposes of this department is to actually handle these claims. If you wish to have them handled elsewhere, you may do so, or if you wish us to act in an advisory capacity you may be sure that we will be glad to do our best for you.

The freight departments of all of the leading railroads of the country are located in Chicago, and we have made it our business to become acquainted with the men in charge of these departments, so that thru that acquaintance we can better handle your business for you. During the past year there has been some misunderstanding as to whether the claims on live stock going to other markets than Chicago can be handled by this office. The freight department of the railroad over which your stock traveled, whether the car went to Omaha, Kansas City, St. Louis or some other market, is more than likely in Chicago. If you are located on a railroad which does not maintain a freight department in Chicago—and they are very few—we can still be of service to you in prosecuting your claim.

A person or firm that does nothing else but handle railroad freight claims is in position to give you information on how to get out of trouble after you have gotten in, and because of experience in procedure can probably obtain more for you on your claim than you can get yourself. Our main service, however, is to try to keep you out of trouble, and not get you into court. In other words, we try to do those things which will tend to cut down the tremendous losses of dead and crippled animals that are occurring at the present time.

To this end, it might be well to bear in mind a few rules that might be laid down to overcome these losses. In the first place, do not try to get an unusual fill on your animals before loading. The man who fills his hogs to the bursting point with swill or mash, usually, instead of getting $15 a hundred for his swill, gets a few dollars for dead hogs and an unusually heavy shrinkage at the other end of the line. In other words, give your animals only an ordinary feed on corn, with a sufficient amount of water, and it will pay you more in the end than to try to get them to take on an unusual fill.

In the second place, haul your hogs to the pen instead of driving them. All of us know that the hog is the most susceptible animal in the world to suffocation and pneumonia after being overheated, and driving them to the pen not only reduces their weight but lays them open to pneumonia.

In the third place, place your stock in the loading pens, with sufficient time before loading to allow them to lie down and rest. In other words, rushing them to the loading pens and then rushing them into the car, with the liberal application of a 2x4 to hasten the loading, may apparently have no effect upon them, but that is not the case. Deliver them to the loading pens in time to give them a chance to cool off before loading.

Again, don't overload your cars. The man who tries to save three or four dollars thru overloading his animals, instead of saving a few dollars usually finds himself with a few dead hogs and a claim on his hands, and a stale bunch of animals that sell at from fifty cents to a dollar discount. Of course, this is not true of cattle, but when you overload a carload of cattle and one happens to fall, they are so close together it can not get up again and they trample it, and as a result you have a few cripples, and a stale-looking bunch of animals that sell at a discount price.

Fifth, don't put a bull or a vicious animal into the car loose with the other animals. The vicious animal should be penned off by itself to protect the rest of the animals from injury.

Then on mixed cars, see that a strong partition separates each kind of animal from the other. If you could see some of the cars that arrive at destination and see some of the supposedly secure partitions that have been broken down, and different kinds of animals mixed together, you would see the wisdom of making secure the partitions you place in the car. With the mixing up of different kinds of animals with hogs running about under the feet of your cattle, or calves with the cattle, or cattle in the hog pen, you can see how easy it is to swell the total of dead that now exists.

In loading your car of mixed animals, see that the ones that will be unloaded first are most easily gotten out. In St. Louis, as I understand it, cars of mixed animals are placed at the cattle unloading chutes first. You can readily see that if the cattle are in the rear of the car, with your partitions up and other animals in the way, to unload the cattle first necessitates unloading your hogs first, then taking out your cattle, and then reloading your hogs, and then shooting them back to the hog unloading chute, and in that way possibly make a loss of considerable weight due to shrinkage.

Then, in the seventh place, in ordering your cars, please order definitely and in writing with the agent. Don't make it an oral order, don't phone and ask simply for a car without mentioning as to whether you want a 34, 36 or 38-foot car, and than if a 36-foot car is set in and you have got live stock enough to fill a 40-foot car, try to put them all in a smaller car. You can see that that is one of the causes that tends to swell the number of dead animals at destination. If the agent fails to order the car you want, you have no way of proving it unless you have your order in writing. If you give your order in writing you have some way of showing what kind of car you ordered, and you should get exactly what you want.

In the next place, if the car has several inches of manure in it, altho it is the duty of the carrier to furnish you clean cars, don't think you are going to make money by not cleaning it out. Clean it out and get it in good shape with fresh bedding before it is loaded. Try to watch these different things, and for this reason you should realize that the collection of claims on dead animals is one of the most difficult things to do at the present time. Of course, the carriers are liable for all loss shown to have resulted from their negligence. Of course, they are not liable for animals that die from natural causes. You can not convince a railroad that that is true, and at the present time most of your claims on dead animals will not be settled for much more than 50 per cent, and in some cases you will have to bring suit to get that. So I say, watch those things, because a dead animal is certain to result in loss to you unless you take out live stock transit insurance. While I am not an agent for that insurance, if you want to be fully protected, if you want to play safe, you will have to take live stock insurance, unless you want to fight the railroad and fight them in a long-drawn-out litigation, because they won't pay much more than 50 per cent in deadage claims unless you can show some specific act of negligence in your behalf. So that those are some of the things you can do to reduce the number of claims.

There are also two things I might mention how you can make your claims stronger after you get into trouble. You have a claim, say, for animals lost in transit. Supposing you list seventy hogs as having been placed in the car, and it turns out at destination that you have only sixty-seven, and you file a claim for three hogs. The shipper will at once challenge your claim. Count the animals, not after you get them in the pen, but after they are put in the car; then have an assistant do the same thing, so that if the thing comes to a show-down and you do have a claim, you are able to file the affidavit of at least two persons that you loaded the number of animals claimed in the car.

You also have a claim, as Mr. Sykes pointed out this morning, for all losses that arise thru excess shrink, and decline in market, as the result of delay.

If you want us to be of service to you on these claims, there is simply one thing that you want to do, and that is to get a copy of your live stock contract, join with it a copy of the account sales, and send it to the Corn Belt Meat Producers' Association, Transportation Building, Chicago. We will acknowledge receipt of the same and try in every possible way that we can to properly represent your interests.

The President: Now, we will spend just a few minutes on this matter if you men have some specific information that you would like to get into the record here concerning the collection of claims or the liability of the carriers, or anything of that kind. We will just spend a few minutes and give you an opportunity to ask Mr. Coon questions.

Mr. Ames: What point in the shipment of live stock does the railroad become liable? For instance, a person drives a load of live stock into the yards for loading and are counted in, and for some reason before they go into the car, owing to defects in the yards the cattle or hogs break away and at loading time they are gone. How far, or where does the railroad's liability come in?

Mr. Coon: The railroad's liability comes in when they issue a live stock contract accepting the shipment for transportation. There is, however, in addition, one other liability or duty which the carrier has—he is to furnish reasonably safe stock yards. In other words, if they furnish stock yards that are diseased, and as a result of their failure to provide reasonably adequate stock yards the cattle that you put in there contract some disease, and you can show the disease resulted from that dilapidated condition of the stock yards, you can also present claim for that.

Mr. Ames: But the railroad's liability extends beyond that, doesn't it, when they issue a live stock contract, and the cattle and hogs are not loaded into the car?

Mr. Coon: My idea is that they are not liable for animals that go into the yards and then break away.

Member: Isn't it true that there are one or two cases that have been decided in favor of that proposition?

Mr. Coon: There might be, but there is none that has come to my attention.

Member: It seems to me that when you drive cattle, for instance, into the company's yard, and because of the poor condition of the yards they are able to get away, that the owner would have some chance of collecting his damage.

Mr. Coon: You may be able to do it, but it would be a long-drawn-out, hard proposition. As a practical matter it would be a very hard job.

Mr. Ames: Suppose that the stock was billed prior to the time that the cattle are loaded, and the railroad receives that bill and signs for it.

Mr. Coon: That is a different situation, then. It is all a question of fact in any particular claim as to whether or not the railroad has accepted that live stock for transportation. If they have issued a bill of lading for it or live stock contract, then, of course, you have got better ground for a claim; but if the live stock has simply been driven into the pen and no bill of lading or live stock contract issued for it, and some of them get away before they are put into the car, I believe you will have a hard time supporting the claim.

The President: Are there any other questions?

Mr. Corrie: I have a daughter who was left a widow, and in settling up the estate she sent a carload of cattle to the Sioux City yards, entrusting her hired man to take them, and for some reason lost the cattle in the yards. He was a sort of ignorant fellow and didn't find the cattle until they had stood in the yards from 2 o'clock in the morning until 5 o'clock in the evening, and finally found them, and she made a claim for $150 for damage and shrink, and so on, and I want to help her out on that, and I don't know whether to go to the commission company or the railroad company or the stock yards.

Mr. Coon: That suggests something that I wanted to talk about. When a man accompanies the shipment, you have a different proposition; the railroad is liable for its negligence, but it shifts the burden of proof. If you are able to show that you loaded seventy hogs into the car and no caretaker accompanied it, and five of the hogs are dead, the burden of proof is on the railroad company to show that it was not negligent. In the other case, if there are seventy hogs loaded into the car and a caretaker accompanies them, then the burden of proof is on the shipper to show that the act resulted from some negligence on the part of the railroad. It is a harder case to make out a case of negligence where the caretaker accompanies the car than where he does not. You have got to prove negligence, instead of having it presumed. It is up to you, since the caretaker accompanied the shipment, to show the negligence on the part of the railroad.

But that brings out the question, when the caretaker accompanies the car, you have got to be on the lookout to show where the act of negligence on the part of the railroad resulted in a loss, and if one or two hogs turn up missing or dead at the other end, you have got to show to the railroad what happened to them if you want to hold them liable. If the caretaker doesn't accompany the shipment, they are presumed negligent until they can show otherwise. In other words, the burden of proof changes when the caretaker accompanies the shipment.

Mr. Rippey: To what extent is the carrier obliged or required to give the caretaker information with regard to the location of the cars, etc.?

Mr. Coon: That is a pretty hard question to answer: I would say that it is up to the caretaker, if he is accompanying the shipment, to keep on the lookout for it, and that is the reason he is given transportation to look after the shipment; but as to any specific duty being upon the railroad to show certain information, or anything that otherwise he would not obtain, I don't know that I could give any more specific answer to that question. I can not conceive how it would come up. If he accompanies the shipment he is supposed to be on the lookout for it.

Mr. Rippey: The car is in bad order, and they ask the conductor if car number so-and-so is in his train. The conductor knows that the caretaker is there by his contract and by his car number. The car is in bad order or set out, and he fails to notify the caretaker, and it is probably a mile or such matter down the line where repairing is being done. Is he under any obligation to notify the caretaker of the bad order, or are they obliged to keep themselves informed at division points to know whether they have been set out, or continued in the same train?

Mr. Coon: The duty would work both ways; it is up to the caretaker to exercise reasonable diligence to see what happens to his car, and I would say it is also up to the carrier to notify the caretaker and give him reasonable notice of what was being done with his car. It is a question of reasonable diligence on the part of both parties.

Member: Is it possible for the railroad company to pay claims of one or two parties, when there are a half dozen parties having identical claims due to the same cause, and not pay the rest of them?

Mr. Coon: Maybe you are the man I have been corresponding with on that point.

Member: Yes, I am.

Mr. Coon: I have got that very question up right now. The specific question is this: The thirty-six-hour release was not signed, and the carrier wasn't able to deliver the shipment at destination within the provisions of the twenty-hour law, which now exists, and as a result they had to unload them. The cars were delayed as a consequence. Claims were filed, and thru some mistake, I don't know how, I haven't had a chance to look into it since I got your last letter, two of those claims were paid by the company, and the claims of the other men have been rejected. Upon the face of the evidence, it would seem that the thirty-six-hour release should have been signed, because it was impossible for the railroad on a normal schedule to make delivery within twenty-eight hours, and to avoid violation of the law they had to unload the cattle. So far as I have gone into the facts, it would seem that none of the claims, in my opinion, should have been paid, but after I get into it I may find some reason that will alter the facts in the two claims I have seen. After I have seen the other three that have been paid, I may find a reason for their payment, but it is certainly a claim of discrimination if they paid three men and haven't paid the other two.

Member: We were all on the train together and we all loaded together, and we none of us signed the twenty-eight-hour release. It was impossible for us to go the other half of the route when it took us twenty-four hours to go the first half; we couldn't make the other half in the next twelve hours, so we didn't sign the twenty-eight-hour release.

Mr. Coon: As I say, I don't know how they applied the facts in the other three cases, but it is certainly a peculiar matter. They certainly discriminated against you, and I will have to get into that, and after I get into it I may find some things that will help me in getting the claims paid for you.

Mr. Ames: Take a man who has ordered a car for loading cattle and he is notified that the car will be there; he drives his cattle to the yards, six or eight miles, and discovers that the car has not been put in yet. That is a point that I have had in mind all the time since I brought up the other question. Does that man have a claim, or doesn't he? If he doesn't, then I think this association and the country at large ought to change the point where the railroads are liable, because after they have given notice that they are willing to accept the shipment for a certain time, and ordered the stock in, they should certainly be liable, and it is my impression that they ought to be made liable.

Mr. Coon: The facts as you bring them out now are entirely different from what you stated before. Here is a case where the carrier has notified you that he has set the car and asked you to bring your stock there. That is a different proposition entirely. The question as to where you have ordered your car and you get your cattle in there after they have notified you that they are all ready, and then the car isn't there, that is an entirely different case, and I think you can go thru on such a thing as that. You have your cattle in your yards, you drive them in the yards, and when once you get there there is no car. In the last case it is a disregard of furnishing cars on reasonable time on reasonable request, and in the other case it is not involved at all. In the last case you have brought out, they specifically say a car will be furnished and you rely on that and bring in your cattle, and that is a disregard of the duty devolving upon the railroad company to furnish cars on reasonable request and within a reasonable time.

Members: We will say that the load of cattle was held in the yard two days after they had been accepted; they stop in the yards two days really, and then while the cattle are being put into the car they break the fence and fall down thru the chute. Now, which of them can I bring suit on?

Mr. Coon: That is certainly a very complicated case. Your first claim is your loss as a result of the failure of the railroad company to furnish cars within a reasonable time, and you have a loss as the result of shrinkage, you have got a loss in decline of price, if you haven't a loss from dead animals. In the last case, if you could show that the stock yards were not reasonably safe and were in a dilapidated condition and as a result of that you sustained a loss of some of your animals thru being crippled or killed, then, as previously said, you have got a claim, but it is only in a case where the railroads have not furnished stock yards reasonably safe and adequate. That is what I said before. That is what I meant to say when I brought out the matter of disease.

Member: You will remember several years ago we had some very severe snow blockades, and five of us came in after the roads got open—I am not a regular stock shipper, I am a buyer—and they required me to sign up a contract "subject to weather conditions." That was written at the top of the contract. Five of us had stock on the train, and we were delayed, and they paid the other claims, but they didn't pay mine at all, and one of the shippers said they had no right to put "subject to weather conditions" on my contract when they didn't on the others.

Mr. Coon: No; they can not do that.

Member: And I put it in the hands of a lawyer and they bluffed him out; he says, "I guess they have got you there."

Mr. Coon: I can not specifically answer that question, because I haven't seen the other three files.

Mr. Thorne: I want to say, with regard to this gentleman who has been talking to you, that that is a very hard subject to handle, because of the multiplicity of legal questions involved. I have a friend who has written a book on damages between shippers and carriers and it consists of over 3,000 pages, with thirty cases to the page, so you can see that there are a great many different issues involved. Mr. Coon informs me that he has received very few claims from the Corn Belt Meat Producers' Association. However, to show you that he does fight a little I will say to you that he has seventy-seven cases in court at the present time, so you can see that he doesn't lay down on them.

The President: I don't think that our members are altogether to blame for not having filed their claims with Mr. Coon, because of the fact that he only became connected with the organization as collector last March, and lots of our members haven't learned yet that he represented the organization, or haven't gotten his name and address, or didn't know where to send things. Mr. Coon's office is not at the stock yards; it is not at the Exchange building, but it is in the Transportation building. We have tried those out quite fully in this discussion and also in my report and I think that in another year Mr. Coon will have a larger percentage of our members' claims without any doubt.

Now, gentlemen, we have with us in this annual meeting two men from a state that has never been represented before in our annual meeting. These men came at our request and invitation to especially familiarize themselves with the plans that this organization has been working on for the formation of a marketing committee for beef cattle, and they both have to leave us this evening, they inform me, and can not remain over tomorrow for this general discussion and consideration of these plans, and for that reason at this time I am going to call on these gentlemen to say a few words. I know you men would like to listen to them, and also to know that they are here and see who they are. At this time I am going to introduce to you Mr. S. P. Houston, of Malta Bend, Missouri, who is president of the Cattle Feeders' Organization of Missouri. He is not merely at the head of the organization there, but he is really in the game himself. Mr. Houston.

ADDRESS BY S. P. HOUSTON.

Mr. President and Gentlemen of the Corn Belt Meat Producers' Association: Now, what your chairman said in his introductory remarks was all right, but that doesn't mean much in my judgment nowadays.

Gentlemen, I am very happy to be with you; I have been your neighber for a long while, and we have all been working at the same problems, and our interests and ambitions are common, and whatever success you people make toward solving the complicating problems that concern the industry today is going to help us, and whatever progress we make will help you.

We came up here not to be seen, but to see, as your chairman has already told you. We came up here at the invitation of Mr. Sykes and Mr. Wallace, to see what progressive plans you gentlemen had with respect to the all-important question of marketing the products of your farms. Now, as I said before, I didn't come to make any remarks, but it seems to me that you have tackled about the biggest job you ever had. If you get away with this, I don't believe there is anything in the years to come that the brains and energy and ability of the Iowa feeders can not accomplish, and I have faith that you will get results. I don't know what measure of results you will get, but it seems to me that you are breaking new ground and carrying on the right track towards a solution of some of our direful and distressful troubles of the present day.

It might be illuminating at this time to say that the agricultural people of this country, as you know, in the past ninety days, have lost in the depreciation of the values of farm products and live stock half enough to pay the war debt—five billion dollars in your corn, wheat, oats, barley and hay, and hogs, cattle, sheep, horses and mules—all products that pertain to farm activities. Now, if that is the case, it looks to me like in the future reorganization of the taxation problem that inasmuch as we have given about half of our worldly goods this year, we shouldn't be compelled to pay very much income tax next year. (Laughter). A good friend of mine down in Missouri, who operates on a good, big scale, said to me the other day, in passing up his profits and losses: "If I could have done something to have broken into the penitentiary a year ago, I would be about $50,000 better off today, and I wouldn't be very much more discredited at home or abroad, either." (Laughter). So that is the feeling we have down in Missouri.

We have the most propitious condition we have had in years; we have the long grass, all sort of corn, and we have everything else except money to buy cattle and the ability to figure out a profit on our year's business this year. It has been one of the most direful years we have ever experienced, and the fact of the business is that a good many of our men are going out of business, because it has been so unprofitable that there is no encouragement for a man to stay with the game any longer.

Now, I don't know that I could say anything further with reference to your proposed plan here of marketing. I have been very much interested in Mr. Harlan's discussion of the mass of information that he gained of the marketing proposition, and I think that the figures that he has presented here would probably, with an extension of that line of research and information, be of untold benefit not only to you, but to every man engaged in the business in the years to come. You are getting down to basic principles, and getting down to basic facts that we all ought to know and should have known years ago.

We are just now, today, beginning to realize that we are compelled to do the things that we probably are saying our more composed judgment would have told us to do two years ago. The fact of the business is, I have thought in my own mind that if the condition of the country after the armistice, was seen today, if our industrial condition had gone to the bottom then like we are today, had headed that way at that time, we would be on the upgrade and near the top of the hill. We have been on a rising plane instead of a declining. I don't know where the bottom is going to be, and no other man living knows. I suspicion in my own mind that we are not near to the bottom of price conditions. It is a regrettable thing to say, it is a tragic thing, and yet every man's business and every man's experience indicate that there is not a rift in the cloud that would encourage a man to put into his business good, hard-earned money that you reasonably know, if you follow it up without let or hindrance and without any improvement in the system of agriculture or marketing, would eventually bring him to bankruptcy. That is not entirely the fault of you gentlemen here. We have been busily engaged in the very necessary and gainful occupation of producing the basic foodstuffs that supply the wants of the world, and we haven't had the time, we haven't had the facilities, we haven't had the co-operation of the necessary agencies of the government, to do the things that we are compelled to do to save ourselves from destruction. I realize this, that the last two years, especially since the formation of the American Farm Bureau Federation, we have gotten together and talked over our individual and our collective problems more than we have ever in all the history of the past. The idea of co-operation and collective bargaining, and all those terms that are calculated to be developed into a new ideal of commercialism in the years to come, must necessarily be of slow growth. It is a matter of education to the common run of agricultural people. I am not different from my own kind; I have not had the opportunity to study those questions as I probably should have done, but it seems to me if we are ever going to get anywhere, if we ever expect to be in a position to claim our part of the increment of wealth that we produce, we have got to get down and do some team-work, we have got to get together and use the best judgment, the best energy, and the best brain-power that we possess among the people that we represent. It is a strange thing in the study of the human mind, whenever times are good we go sailing along, drifting like the summer clouds, and we never think of the pitfalls and the calamity that are awaiting us just down the lane a little bit around the turn. If we could see those things, probably we would have shaped our business differently. I know, I flattered myself that (if you will pardon a little personal reference), I flattered myself that I was going to quit the game, which I was absolutely afraid of risking any further—I felt that there would surely be a day of reckoning, and I didn't want to be under the foundation when the house fell, but I am just as deep in the basement as any man here. (Laughter). My intuition didn't overcome my fascination for the business, so I am still on the job and will probably be wading thru snowdrifts with the balance of you all winter. (Laughter).

Now, gentlemen, the matter of co-operation, in some respects, it seems to me we are overworking that term, we are applying it to many things that in a measure are not applicable, but if there ever was a condition, if there ever was an industrial proposition, that the spirit and theory and the practical side of co-operation is applicable to, it is to this very proposition that you gentlemen have before you, and that is in the matter of marketing your produce from the farm, and especially live stock. I don't know—of course I have never studied this until today, I have never read it—but if we opine to even gain a living by virtue of our occupation, we have got to organize, and when you organize it means that you must do teamwork and you must co-operate, and when you cooperate you have got to make up your mind that you are going to sacrifice some of your personal independence, you have got to sacrifice in a measure some of the ideas that you know better how to attend to your business than anybody else, and that you aren't going to give it to any committee or council or board of directors. If you have got that idea in mind, and you intend to maintain that, you might just as well quit talking about co-operation. That's my notion about it. But if you are willing to go into this thing, sink, survive or perish, and cast your lot in the pot with everybody else, and use the very best methods you have in your organization or any other organization, you will succeed. You may not succeed in the measure that you think you ought to, but the greatest things that the world has ever accomplished have been things that have been brought to light and into existence under primary conditions like you gentlemen here trying to find out some way to light you thru the dark caverns and the dark conditions of today.

So I say, if you are going to try to put this proposition in operation, if you men in Iowa, with your members and your wealth to back it, and with your experience, can not make a success of it here, there's no use of our trying it in Missouri, or going to Kansas, or anywhere else.

Now, I don't mean that in the application of the theory of co-operation any man or anybody ought to lay down on the job—I don't believe that is the God-given privilege of a farmer. I believe that God Almighty made the farmer to work. (Laughter). He wouldn't have made your muscles so strong, your flesh so hard, if He hadn't intended you to work; consequently, He has put the biggest burden on your shoulders of any class of people in the world. He has absolutely got you on the job to work. Today, one-third of the population of this great commonwealth is feeding the other two-thirds, providing everything for their necessity, their luxury and their comfort, and you are working sixteen hours a day to do that, while the other fellows are working six or eight, and loafing part of that time.

Now, I say you have got about the biggest job of any class of people in the world, and certainly you realize that if you have been very studious and very attentive to your business that God Almighty didn't intend for you to lay down on the job, because if you had you would not have gotten very far.

Now, gentlemen, I want to say this, whatever you men do, we are going to watch your steps. We are not strong in Missouri; we have an organization of several hundred men, the standing men of the different counties of the state, and we in the years past have been able to do things that were helpful to our people, but we have not been able to do the really big things that count for something in the long run. Now, we can not all be successes; we won't all be successes under any plan or theory of co-operation. Men will be failures in every avenue, in every industry in the world. You have right here today, I daresay, men who by virtue of their peculiar surroundings, their fitness, their facilities to handle their business, probably can show a profit, but ninety-nine of their neighbors will have to close up their accounts this year with red ink.

Now, it is not within the province of any man to live unto himself alone in this great world. It never was and it never was intended to be. If we can not be helpful to our neighbors, if we can not contribute if we have superior ability, if we can not contribute to their uplift and their betterment, we are not living the part of a full-sized American citizen, and it is for us to do our best, and do it in a faithful, straightforward, patriotic, American way.

I am very glad to meet you gentlemen, and I hope that if you come as far south as Columbia, Missouri, where we are going to have a two-days' session on the 18th and 19th, during Farmers' Week, we will be more than glad to see any of you there.

The President: We also have with us Dr. Nelson, of Missouri, and at this time—I am informed that Dr. Nelson has just gone out. I was going to ask Dr. Nelson to say a few words to the convention at this time.

Adjournment taken until the banquet hour.

THE BANQUET.

The banquet was held Tuesday evening, December 14. Henry C. Wallace presided.

The Chairman: There are three things that farmers and stockmen of Iowa are very intensely interested in just now. One is the matter of markets, especially the foreign markets; one is banking and credits, and the third is the transportation and organization business. In preparing for the program tonight, we felt that we were bringing before you three speakers who would talk on those three topics in which you have probably more interest than anything else. We will first hear from Mr. E. G. Montgomery, who is in charge of the Bureau of Foreign Markets of the Department of Agriculture; then Mr. E. B. Wilson, president of the First Trust and Savings Bank of Des Moines, who will speak on banking, and lastly we will hear from our own Clifford Thorne on transportation matters.

I will therefore first introduce to you a Nebraska boy who later took training in the east in Cornell College, and is now in charge of the foreign markets of the Department of Agriculture—Mr. Montgomery.

WHAT OF THE MARKET FOR FARM PRODUCTS?

By E. G. Montgomery.

Last January one day I happened to pick up the leading agricultural paper of the United States—and of course I won't have to tell you gentlemen here the name of that paper (laughter), and this sentence caught my eye: "The farmers of the United States are entitled to just as good information in regard to supply and demand of agricultural products as anyone." And then it went on to explain that many of the large marketing agencies, such as the large buyers of live stock, the buyers of grain, etc., had their own informational service more or less developed; they had statisticians in their employ in foreign countries, and were able to go to their files and learn what is going on anywhere in the world; but as a rule the farmer doesn't know what is going to happen until some time after it has happened, which is usually too late to help him very much in forecasting his marketing.

That appealed to me very much, for this reason, for several years I had been particularly interested in the study of the world supply of and demand for agricultural commodities, and it seemed to me that there was an opportunity for real service if we could develop that.

Now just at present there is a vast amount of interest in the world situation with regard to foodstuffs and raw materials, such as wool, cotton and grain. That is particularly an outgrowth of the interest we took in those subjects during the war. For the first time in history, our newspapers, our local papers and our farm papers, talk about the world supply of food, the world supply of clothing, the world supply of leather, and so on. Heretofore we had only talked of our own local affairs, but it was impressed upon us during those two or three years of war the tremendous importance and the serious depletion of these things which were produced thruout the world, and the demand of the world now for those products which America alone seems to have in abundance.

We also realize that there is one great market center for raw products, for agricultural products, and that is Europe. All the rest of the world produces a surplus of more or less importance, so that you have one continent, and the western half of that continent particularly, western Europe, which is a market, and you have all the other continents delivering goods to that market in competition with each other to a certain extent. That is practically the world market as I see it.

World Price Levels.

Now, I think we are beginning to recognize that most of these great commodities are controlled by world price levels. I have heard some things lately that indicated that some people thought we could get away from world price levels, that it was possible to create small monopolies in a state or in three or four states, or in one country, and to a certain extent disregard those world price levels; but that, it seems to me, is something that we cannot afford to disregard. I can illustrate the world price level by reference to the wheat crop. Wheat is one commodity, together with cotton, that has a world price level. For example, on the Atlantic ocean today there are about 40-million bushels afloat—it varies from thirty to fifty million at different times. Most of that wheat is either consigned to ports in Europe, or it is sent on orders—usually from one-third to one-half under orders—which means that it is not consigned to any one in Europe, but when it reaches its port it will be consigned. Now, by means of wireless a couple of those boats can be consigned to any port in the world. If any wheat market in the world gets out of line three or four cents, whether it is London or Paris or Hamburg, or one of the Mediterranean ports, it at once draws wheat—one or a half dozen cargoes can be diverted there within three or four hours. Now, that practice, you can see, keeps the world price level on both sides of the Atlantic about level. The port prices are about level, minus the difference of transportation. When you get into the interior, price changes according to the cost of transportation and handling, and so it is that we have in wheat, for example, the highest price at Liverpool, on the average. Then as you come to the Altantic ports it is lower, and as you go to the farthest point where wheat is delivered to Liverpool, which is Australia, it is still less. From Liverpool eastward wheat decreases in price until it reaches about the middle of Germany, and in middle Germany it meets the wheat that comes from Russia, and Russia is another country of low price levels. That is, before the war when conditions were normal.

That is the way the world price level is maintained. Now those currents move up and down according to world supply and world demand. In the meat business, of course, it is not so violent, for a large part of our meat is used at home, and it is home supply and home demand which has more effect on meat prices than the home supply and demand on wheat prices.

Now, a very important thing in the making of prices is demand, and that is what I want to speak of in regard to the present agricultural situation, with reference to the foreign markets. I want to advert a little bit later very briefly to a plan that I have had in mind for a long while for developing a foreign market news service, but I want to point out a little bit before that some reasons why I think we need a world market news service that will keep us informed both as to supply and as to demand.

Supply and Demand.

We have heard that old phrase "supply and demand." The price of a certain commodity, we say, is fixed mostly by demand. That is what we call effective demand, which means the price somebody will pay for a thing. In Europe, for example, today we have an enormous demand for foodstuffs and clothing, but a very poor effective demand, because they cannot pay for very much, and that is the thing that has affected our world market today more than anything else.

Right after the close of the war there was a great deal said about the enormous demand which Europe would make at once upon us for food and clothing; we all realized that their demand had been below normal, and it was anticipated that there would be an enormous demand. Now, speculators, both on this side of the water and on the other side, loaded up all of the warehouses of Europe with food and clothing, mostly foodstuffs, right after the war. If you will notice export figures, you will see that they sent over enormously increased cargoes of merchandise for about eight months. Effective demand failed to materialize, and we have had shipped back during the past summer great quantities of canned goods which was sent over more than a year or a year and a half ago.

Demand did not develop, and as a consequence a great deal of money was lost, and a great many bankruptcies occurred, especially in Europe. What was the reason? It was found that the people couldn't buy. They needed the things we had, but couldn't pay for them. We had correctly anticipated what they wanted by what they needed, but failed to take into consideration that they could not buy what they wanted and needed.

Cotton and Wool.

Now, take cotton for example: Germany had practically no cotton during the entire period of the war from the outside, except a very little reserve which it was able to get from Holland and the Scandinavian countries and the Balkan districts, and naturally we expected Germany to take cotton in enormous quantities. But in the first year after business resumed after peace was declared, they took only 550,000 bales, which is a little less than one-third of their pre-war consumption. This year they will be able to take 800,000 bales, according to present estimates—still two years after the war one-third of their pre-war consumption of cotton was only being demanded, altho they have been out of cotton for a number of years. The difficulty is that those people have nothing with which to buy, and with the consuming power of Austria and Czecho-Slavokia and Jugo-Slavokia curtailed, you can see that that great market which we once had, is what we now call a poor buyer. Their needs are great, but their effective demand is not developed yet, and that is why you are hearing so much today of various schemes to put them back on their feet to secure purchasing power, for, after all, people have to buy.

The purchasing power of a people is dependent upon their wants and earning capacity. For example, we have in Africa about 60-million people who don't furnish us a market for one ton of anything. They have no wants, and they don't buy anything. As you increase their wants and their earning power, you make a market. War has torn Europe for a generation or two, and that is what has weakened our wool market and our cotton market and our wheat market. Ever since the war we have had an extra large accumulation of wool. I took occasion to make a very careful study of this situation during the past year when there was a great deal of talk as to what was the matter with the wool market. Among other things we cabled to all of our commercial attaches and embassies in various countries to make a careful survey of the supply of wool on hand, including New Zealand, Australia, South Africa and India, and thus, with other data we were able to find out to our own satisfaction what the trouble was. There was on hand then about eight or nine months' supply of wool more than the world normally has on hand. Normally we carry about six or eight months' supply of wool ahead. It takes about that much surplus to last the country over a given period. And we learned that we have in the world today about a year and a half supply of wool, and that supply has been accumulated since the war, and that accumulation is due to the fact that the world has not consumed anything.

The same condition that I have related with reference to wool also applies to cotton. Before the war the world consumed 18,000,000 bales of cotton a year; that was the world's annual consumption of cotton before the war. During the war the demand came down to 15,000,000 bales, and last year, due to the fact that there was starting up a great many mills, an enormous demand during the first half of the year was created and the demand came to 17,500,000 bales, while this year we are down to 15,000,000 bales. For the first three months of this cotton year, we are on a 10,000,000 bale basis. We are not producing more things of this kind today than we did before the war; we are not producing as much cotton as before the war; we are producing about the same amount of wool, and if you exclude from consideration Poland and Russia and the Balkan districts. we are producing just about the same amount of breadstuffs; it is not an overproduction of these things, but the consumption of the great markets of Europe is below the average.

What Can Be Done?

And that brings up before us a great question for our farmers to consider, and I do not know what the solution is. I know this, that if we had, in a manufacturing business, an oversupply of steel or any other commodity, we would shut down two or three units of the plant until we had disposed of the surplus and got back on a supply-and-demand basis. But you farmers are not on a supply-and-demand basis—you are asked to continue production just the same. Whenever you have a surplus that is visible and very large, you are expected to continue production at a reduced return, and the trouble is we have a surplus in most of those things. I don't know what we are going to do. I had hoped that the time would come when we would find some way in agriculture of adjusting to these changing conditions without the hardships that agriculture has faced thruout all history.

This situation we are now facing is not new. Take Europe, or any other agricultural country, and in looking over its agricultural history you will find that this depreciation in demand for agricultural products has always caused a drop in price, and when the supply has diminished the price advances proportionately. Prices would stay down until the marginal men were forced out of production and the supply had again caught up, and then we were on a supply-and-demand basis again.

Market Information Needed.

It seems to me we should get a better way of adjusting world demands. Two things are to be considered all the time. One is production and one is demand. But demand has changed. Demand may pick up again, but those things ought to be foreseen, and it seems to me that possibly one solution of it is this, to develop a world market information service which will give us as accurately as we can get it the trend of production in all countries, and the trend of consumption of raw agricultural products. That is something we have very little on in the way of actual facts. It is strange how much we go by hearsay in those matters. Why, even the Chicago Board of Trade will take rumors very often. I remember one last summer—they said they had had rain in Argentine when they needed it very much, and that rumor affected the price of wheat, and it was found the next day that the rain was not in the wheat belt of Argentine. That sort of thing ought not to occur. We ought to be able to know by cable just as soon as a rain happens in any part of the world sufficient to affect the price of products. I have had a feeling that there was need of developing some kind of world market information service which would give the trend of production of these great agricultural commodities. We might just as well have the facts, and if we find that there is some country producing something cheaper than we can produce it and put it on our market, we want to know it, and we want to know it far enough ahead to make adjustments, either to secure protection of a political nature thru a protective tariff, if it is advisable; or if it is not advisable adjust our production on that basis.

South American Competition.

There are several ports of the world that need watching by the American farmer very closely. In the first place, in South America, a territory much like this Mississippi valley forty or fifty years ago, and you know the development that has taken place in the past forty or fifty years. It is not only showing great competency in raising live stock and grain but they are now taking up the production of cotton very successfully. It is now thought that they will develop cotton culture in the northern part of Argentine, which has a climate much like our southern states.

Can they raise cattle in competition with our cattle? If so, we ought to know that. We ought to know whether there is a tendency to develop cattle production on a large scale during the next twenty years. We ought to know whether their packing houses are developing, and their ability to get onto the European market in competition to American products. Is that developing so that they can come in competition with our products. We must know those things, because that directly affects the American farmer and his products.

We know from experience that they can develop hogs down there very successfully, but they do not develop enough corn, so we do not have to worry so much about that matter yet.

There is a great competitor slowly developing on the South American continent.

Then we have New Zealand and Australia. Before the war Russia furnished to Europe 15,000,000 tons of grain annually, almost half of the imports of Europe. The coming of Russia into the markets of the world again is a matter of the greatest vital importance to the grain producers of this country, and we ought to be watching it carefully and forecasting its coming back two or three years ahead. I don't know what our solution will be when it finally comes back, but perhaps by that time European demand will have increased as fast as it comes back. I certainly hope it will.

Foreign Market Service.

Those are some of the things we ought to know if we would adjust farming on an agricultural business basis. That is what the large handler of those commodities knows, and he adjusts accordingly as he sees these economic changes coming in foreign countries. Now, I think that it is possible to build up a service of some kind that will give us this sort of information, and I want to outline very briefly my ideas on that.

In the past eight months I have visited almost all of the large agricultural organizations of the country and asked them what was their idea about the developing of a foreign market service. I have visited the Cotton Growers' Association, the Dairymen's League, the Fruit Growers' Association, and a number of other large associations of that kind. I have attended just a dozen meetings of the grain and live stock men here in the corn belt, and I have tried to figure out what kind of service can be developed.

Personally, I don't want a service that simply records history. As we all know, government agencies are accused of developing simply a means for recording things that happened after they happened—history mostly; but in the marketing game we want to know what is happening, and what is going to happen a year ahead of time. I feel that kind of thing can be developed in grain and live stock and wool and cotton and dairy commodities, and I have tested it out considerably this summer by trying to see what use could be made of our own consular service in foreign countries, to see what information they could get, in a very small way.

Now, we have in the corn countries of the world several hundred men who are foreign consuls attached to either the State Department or the Commerce Department, and then we have men under them called attaches. These are men skilled in watching political events and the trend of economic events, but they are not skilled in agricultural matters. These men are located in every large city in the world—South America, Europe, Africa, Asia, and everywhere else. Now, I think without any great difficulty, without duplicating any machinery, it would be possible for us to put trained agricultural experts into the principal centers that we think will give us information—Russia, Argentine, Australia, because they compete with us in grain and live stock. In Europe our great market lies, and our responsibility lies in observing the trend of agricultural conditions and live stock development. We should have correspondents in every large city to keep us posted on the trend of agricultural events, and I believe they could be made to render us a most valuable service with reference to the packing industry of South America as it relates to hogs, cattle and sheep. That would be of great value to us in trying to shape our own agricultural policy. We could do the same in Russia, in Argentine, in Australia. And in the great markets of the world in Europe we should place our trained observers who would report to us concerning the absorption of these products.

We get some information now as to the absorption of these great commodities, but we can get a great deal more, and I made a number of attempts recently to enlarge this service. I have here, for example, a report on the cotton situation in Germany very carefully prepared by our embassy there, in answer to a set of questions which were worked out, and I have various reports on the meat industry in England worked out in the same way, also relating to the American pork controversy that is now going on over there. We have now a man in Australia and New Zealand making studies of the dairy industry over there, because those countries are going to be our principal competitors in cheese, butter and condensed milk. We have a man now in London as an experiment trying to study and report to us on European conditions as he sees them from London. It is only a small beginning, but it seems to me that such a service can be developed and be of tremendous advantage to the American farmer.

Farmers' Statistical Agency Needed.

Now, there is one other thing needed, and this I think is fundamental, and that is the development of a farmers' statistical interpreting agency. We have heard something about it, and I have seen some things that leads me to believe that sooner or later you farmers will develop for yourselves a statistical interpreting agency. Now, you know, the government is limited in its work about collecting and presenting facts without very much interpretation. We could hardly go into the business of prophesying prices, but I believe if we had working with us a farmers' economic committee who could tell us what they wanted, we could collect the facts, we could turn it over to this group of men—who might be live stock men in one case and grain men in another case, and let them interpret and tell the farmers of this country what to do in live stock, grain, cotton, or what not, what is developing in view of the world's markets. I believe that we need such co-operation. I believe that one of the weaknesses of the statistical work of the government is that we are not directly connected with the producing agency. I think that is particularly true of the government departments. Usually there is great temptation to compile a great many things that the people do not use, and that is because we are not in contact with the people who ought to use them. And if this is developed, I think that there will develop a use. We can develop a great deal of information that is not now being used, and so I hope that organizations like this, and organizations like the Farm Bureau, and others, will, just as I saw this afternoon in this room, be prepared to take facts and figures and interpret them for their own people. I think that is going to be necessary. It is the thing that the cotton men will have to do for the cotton growers, the wool men for the wool growers, the live stock men for the live stock growers and feeders, and thru these great marketing agencies that are being started I hope something of that kind can be worked out.

Promoting Demand.

Now, I might say that there is just one other thing in connection with this that is possible, and that is trade promotion work. Now, I am very optimistic about governments going into trade promotion work. I think there is a limited field there, and we are trying it out experimentally. For instance, two men are just returning from South America where they have been investigating as to the possibility of selling pure bred live stock in South America. We thought there was a possible outlet there, and that we might do something in the way of building up our own great pure bred live stock business, and so these men are ready to report on their observations. I have had an opportunity to see their findings, especially with regard to the introduction of two or three breeds of cattle and two breeds of hogs into Argentina. We feel that that is a legitimate business, a legitimate piece of work that we can assist in. We feel that those men who are representatives can go to foreign government officials and get information that individuals cannot. In Buenos Aires we are making plans to carry on the work which we have done in that city thus far, with every prospect of success.

Just now we are trying another experiment in trying to study the fresh fruit market in this country to find a means of taking care of our American apple crop, and there is every hope of success.

Those are two of the things in trade promotion that might be tried. If the agencies here can co-operate, I think we can co-operate. We cannot do it on our own initiative, but we can co-operative.

I have very briefly outlined this, because it is something that I am very much interested in. I think that, of course, there are many things that came up that I don't want to get into a discussion of this evening, but I think I have set forth the main world situation that affects the market commodities today, and that is the buying power of Europe, and that is the one great thing to watch in the next five or ten years—the return of that; and then I hope I have been able to point out to you the need, especially by the farmers, of such information, and some way of having it passed on and interpreted so that he can get it. The large agencies that handle your products do that to a certain extent, and I believe I am in entire agreement with the quotation I made at the beginning of my talk when I say that I feel that the farmer himself is entitled to as good information as any agency that uses the world supply of those commodities. (Applause).

The Chairman: I think one of the most hopeful things in connection with the national government is the gradual growth of the work such as Mr. Montgomery has outlined. They have come to see that the purpose of the Department of Agriculture is not only to increase production but part of it is to help us to market our products at fair prices.

I am now going to introduce a man who has spent his life in the banking business, who is the president of the First Trust and Savings Bank, in Des Moines, who will talk to us on the banking and credit situation—Mr. E. B. Wilson.

THE BANKING AND CREDIT SITUATION.

By E. B. Wilson.

My first contact or impression of the real economic meaning of the work of the meat producers of Iowa was when I was a small boy. My father was a banker in northeastern Iowa, a private banker. When the panic of '93 broke out, two national banks had failed in a town about twenty miles to the north of us, and about midway between my father's town and this other town there was quite an Irish settlement. The Irish had been keeping on deposit considerable money over in the other town, and consequently had considerable money in the banks that failed, and also considerable money in my father's bank. With the failure of those two banks, they were rather uneasy, and every day some of these Irishmen would come into my father's bank and would stand around and not say much, tho their actions told us a whole lot, and father realized the situation, and for some reason or thru wisdom and foresight he had accumulated two large cakepans of gold—old-fashioned tin pans with the flaring out at the top—and he had accumulated those two cake tins of gold coins, and he would invite Mike into the back room and ask him to sit down a moment, and father would slip around to the vault and would get these two pans of gold and would carry them on his hips to the back room, and as he approached he would say, "Mike, heft that," and as Mike reached for the pan father would let go and the whole thing would drop down in Mike's lap with a jingle of the coins, with those bright gold coins all about him, and the psychological effect was wonderful, and the word soon spread thru the community, and thereafter father had no difficulty at all.

But that wasn't all that father had back of him. He had played another hunch years before, he had looked ahead, he had encouraged the feeding of cattle. There were not many cattle being fed in that community or in the surrounding country, but after some ten or twelve years he had gradually encouraged the feeding of cattle in that community until the industry was well established. I remember particularly one good old German farmer that we will call Fritz who was a very extensive feeder, and during those very trying times Fritz used to come in about every other day and say to my father, "Vell, I haf two more cars of cattle retty, ven you vant dem shipped I will ship dem, John," and those cattle kept going to the Chicago market and the money kept coming back to the bank, and it was a regular tower of strength to that bank and my father during those trying days.

Now, coming down to the subject of this evening:

Going Up.

Did you ever take a ride in an airplane? Did you ever go sailing along at a high altitude, and the higher you went the safer you felt? The fields of corn and small grain looked like a checker board on the landscape. Hills seemed to smooth out and everything looked on the level.

As you looked ahead, you saw nothing but spacious atmosphere and unlimited sailing space. You reflected that there had been a war, but the war had made possible the development and perfection of the plane on which you were riding, and the aviator who was driving the plane had been educated in the school of war. But the war was over. The plane was soaring and surging along. The engine was hitting along on all eight cylinders. There was not a jar nor a jolt. You felt as solid and secure in your seat as you would in the rocking chair at home—and why not go higher? And so you motioned to the pilot; he pulled back on the "stick" and the nose of the plane lifted and you were off to higher altitudes.

But suddenly there was a decided bump, and you realized that one side of the ship had run into one of those peculiar atmospheric currents where the air was ascending on one side and descending on the other. It was a surprise and fair warning, but you were soon out of it and sailing along as usual, because the engine was pulling steady and regular.

What next? It came quickly. The engine began to spit and miss, and there was a sickening feeling that you were losing speed. The pilot sensed what the trouble was and he headed her, nose down, toward the ground. You seemed about to hit the earth head-on when by a sudden shift of the "stick" the plane righted up, leveled off, and then settled down and began bumping along solid ground.

The mechanicians came running out to the ship. What was wrong? Why did the engine miss? And then the investigation began. The carburetor was examined and it was discovered that some water had collected there. The gasoline did not seem to be feeding from the tank. Investigation disclosed the fact that the feed pipe was clogged up with grease, as if some lubricating oil had gotten into the gasoline tank, and, being heavier than gasoline, it had sunk to the bottom of the tank, and while the engine was running it began to work up thru toward the carburetor, resulting in clogging up the feed line. The gasoline tank was examined and traces of not only lubricating oil, but also particles of dust and dirt, were found in the tank.

When the engine would not run the plane had come down.

How soon were you going up again? Just as soon as the engine could be cleaned and put into working order and a new supply of gasoline run into the tank, and when you start up again the engine is going to occasionally spit and sputter and miss. And before you leave the ground and commence to climb you will have to gain considerable momentum, and your going up will be much more gradual than your coming down.

The aviators tell us that the currents of the air not only travel in horizontal stratas, but also in vertical sections; that in crossing over water the air current is upward; in passing over black loam soil, plowed ground, the air current is downward, and in sailing over roads or timber the air current is upward.

The Flight of Prices.

Economically speaking, we were sailing around in the clouds last year. The price plane was surging along mounting higher, and we felt as comfortable and secure in high prices as if we were sitting on the Rock of Gibraltar, but we were a long ways above a normal line. Suddenly we struck the down air current of decreased foreign demands for our food products. Up to a short time before we had been exporting in value approximately 15 per cent of our total production, and a large part of this was more recently represented by agricultural products. This large export came along as a result of the starving necessities of European consumers rather than because we were really trying to supply them with food products cheaper than they could get them anywhere else in the world. But our European customers had no money with which to pay for the goods received, therefore every time we sent over a shipload of wheat or pork, somebody in this country had to take a promissory note from somebody in Europe. Up to the first few months of this year we were being paid for our goods out of the proceeds of loans which our government had made to the governments of Europe, taking bonds of the European governments as their promise to pay. With the close of the war, over two years ago, our government quit making any further loans to European governments, but, of course, there was still quite a large amount of these funds not yet used, but which became exhausted early this year.

In the meantime, Europe had been selling back to this country a great many bonds and other securities which they had formerly purchased in the United States, such as bonds of American railways and other corporations. In selling these bonds back to us, they, of course, realized funds with which to pay for some of our wheat and pork, but after a while Europe practically ran out of our securities, and therefore our banks proceeded to finance some of these foreign shipments on what was supposed to be a short-time credit basis. The credit engine, mainly represented by the banks, seemed to be functioning properly, and we were soon out of the bad down air current represented by decreased foreign demand for our food products.

But Europe could not and would not pay for our wheat and corn within a few months, and our larger banks and other financial institutions then found that they had on hand from $3,500,000 to $4,000,000 of long-time obligations instead of short-time paper, and therefore found themselves unable to proceed further in the financing of current shipments.

In the meantime, under the stimulus of war production, we had greatly increased the amount of crops produced, and, thanks to a kind Providence and good weather, we have an unusual surplus of wheat and corn in Iowa and generally thruout the middle west.

In other words, the credit engine began to show signs of misfiring, and the good ship of business began to show signs of losing speed and singing. Evidently something was wrong with the banks and the character of their resources. Then there began the most precipitate downward flight of the price plane which history has ever witnessed. We seemed to be headed straight for destruction. There was apparently no control over markets; in fact, there was no market. The ship of business seemed to have its nose headed straight for ruin, but the balance of the rigging of the ship, as embodied in the Federal Reserve System, was holding staunch and firm, and the pilot, in the person of the Hon. Wm. P. G. Harding, Governor of the Federal Reserve Board, had noted the increased sluggishness of the credit engine and was ready for the descent. The landing has been safely made.

What Has Happened to Credit?

But what is wrong with the credit engine? And why is it that the farmers and meat producers in the middle west suddenly find themselves so restricted in their borrowing? And why is it that the banks cannot now furnish all of the funds which are now so much needed? Let us look over the credit engine called the bank. First of all let us be clear in the thought that a bank does not manufacture credit, or money to loan, out of thin air, any more than you can make gasoline out of water. A bank in any community is simply the central exchange place for the accumulated savings of the capital of the community in which it does business, as the telephone exchange is the central place thru which we are able to carry on conversation with our neighbors. Some of these deposits represent small savings, payable at a definite time, and with a fixed rate of interest thereon, usually from four to five per cent, and the obligation of the bank to pay these savings is represented either by a savings pass book or by time certificate of deposit. Other deposits represent occasional or seasonal accumulations of money on the part of business men and farmers, which deposits are payable on demand and are usually withdrawn by a check on the bank. The only other liability which a bank ordinarily has is for the amount of money paid in by the stockholders for the capital of the business.

Now, the money put into the bank by the depositors and the small portion of money put in by the stockholders is available for loaning out to borrowers in the community, with the exception that a certain part of the resources, usually 10 per cent, is required to be available in actual cash. This percentage is called reserve and is required by law to be maintained intact. Then the money as loaned out to farmers and others is represented in the assets of the bank by promissory notes, mortgage notes and some bonds.

Everything goes along lovely with these banks just as long as Tom, Dick and Harry leave a certain amount of deposits in the bank, and as long as Peter and Paul pay back the $2,000 they have borrowed, thus making the $2,000 available to be loaned to John and Henry. Any one can run a bank under those conditions, assuming, of course, that he used reasonable care and discretion in loaning the money to responsible people. And as long as the money in the bank is loaned to people who repay promptly, and within a period of a few months, and is loaned for the purpose of enabling them to handle merchandise, corn, oats, cattle and hogs, which are going to market steadily and finding a ready sale, then a bank's assets are said to be liquid and readily available. Under these conditions if some of the bank's customers should start to withdraw their deposits the banker would simply recoup his loss of funds by calling in some of the loans made, as they became due, and by not making any new loans.

In normal periods, the banks in the middle west will during the summer accumulate more money than is called for by the people of the community, and if they are wise they will carry this in the form of deposits in banks of larger cities or in the form of promissory notes, or acceptances, payable by persons or concerns located outside of the community. Then when the demand for local loans comes on in the fall, they will make the outside fellows pay up and be ready to take care of people in their community.

Iowa Money in New York.

I think there has been some notion in the past, which probably still persists, that the Iowa banks have great sums of money in New York banks which are used for the purpose of speculation. That might have been true to a small extent some years ago, but it is not true now. And even as the deposits go off, the banker feels that he ought not to call upon the good farmers or his other customers in the community to pay up immediately, at least until they can market their crops, so when he has some loans he cannot collect there is only one thing for him to do and that is to borrow money from the banks in the large centers, notably from the Federal Reserve Bank. The supply of credit which the Federal Reserve Bank can extend is also limited: limited to the amount of deposits it receives from member banks and to the capital stock paid in. And so if the Federal Reserve Bank in Chicago, which is the central bank for this territory, should run out of funds to loan, and would still want to favor states like Iowa, it has one other recourse, it can borrow from other Federal Reserve Banks—and I want to tell you right here that there are at the present time only two Federal Reserve Banks in the United States which have any surplus funds, and we have the example of two of the largest banks in the country, the banks in New York and Chicago, borrowing from the smaller banks at the present time. And if the Federal Reserve Bank of Chicago has broken that law in the slightest, I believe it has been in the direction of favoring the farmers and producers of Iowa.

Every man knows that it takes a thin, clear, quickly evaporating liquid, ordinarily gasoline, to run any kind of a motor car, and that the moment water, grease, dirt or any foreign substance gets mixed in you are headed straight for trouble. Well, it takes just as thin and clear a mixture of short-time, prompt-paying notes to run a bank properly.

Now let us hark back to the airplane and to what the mechanicians found was wrong with her when she came down. You will recall that they found water in the carburetor; the pipe line was clogged with grease and there was dirt in the carburetor. Now, picture, if you will, a glassful of gasoline, clear and high-test, as representing the assets of the banks of Iowa early in 1918. Now we will pour in a little water, and a little more later, and let the water stand for loans made by the banks in order to aid in the purchase of Liberty Loan Bonds. There is nothing wrong in loaning on Liberty Loan Bonds if the loans had been paid and the bonds actually absorbed from the savings of the community, but they were not generally paid. The banks are carrying great amounts of these loans, and the whole Federal Reserve System is waterlogged with war paper loans, loans made against Liberty Bonds. This wasn't a serious thing in itself, because if just water had come into the carburetor of the engine, it could to a certain extent have been drawn out or blown out by pulling the choker and enriching the mixture. So these loans might have been drawn out by the simple expedient of paying them off gradually. The effect is not perceptible to the eye, but the firing power of the gasoline, or the lending power of the banks, has been weakened, because the bonds were not absorbed.

Then suppose we throw in some heavy oil to this gasoline, and note what the effect is; and let us let that heavy oil represent $100,000,000 of blue-sky stock subscription notes purchased by the banks of Iowa commencing early in 1919. (Laughter and applause). And when I tell you that most of these notes represented more stock purchased than the maker could pay for from the normal accumulations and savings in three to five years of good times, you will understand why the pipe line of credit began to clog up.

You know, those blue-sky salesmen promised wonderful dividends from the stock they sold, and some of the promises they made remind one of the story told of a Red Cross nurse attempting to train a raw recruit something about emergency work. And after some instruction the question was asked, "What would you do if you found a man unconscious on the field?" and he said, "I would give him a drink of brandy." "Very well," was the reply, "but what would you do if you didn't have any brandy?" And he replied, "I would promise him a drink." (Laughter).

Now, we have got this gasoline mixed up with some water; we have got it into the carburetor, and we have got some lubricating oil representing $100,000,000 of blue-sky subscription notes in the banks, and then what next happens? Well, if you can imagine this pepper is dirt, then along comes the land boom, and we will throw that dirt in. You thought that was going to hurt us until last March, and then it was all over, but the banks were loaded up with war paper, second mortgage paper, and there were heavy demands on land contracts—big pieces of land bought with very little cash—and that added at least another $100,000,000 to the burden carried by the Iowa banks.

Now, shake the mixture up, and what a useless mess we have. And while we are shaking, some of the gasoline has evaporated, and this is analagous to a serious shrinkage of the deposits of the Iowa banks.

When Can We Start Up Again?

So much for the problem. Now for the solution. We are ready to go up again. How? And when?

At the present time there are two outstanding proposals for relief from our present predicament—the revival of the War Finance Corporation, and the creation of large foreign credit corporations under authority of the Edge law.

The War Finance Corporation was brot into being early in 1918 for the purpose of enabling the government indirectly to finance the producers and manufacturers of war materials. The funds which the corporation loaned out were derived from the sale of its bonds, which were purchased mainly by the banks, and then the banks borrowed against the bonds as collateral thru the Federal Reserve Banks. This process would have resulted in another vicious circle of inflation had it long continued.

With the signing of the armistice in November, 1918, the loans made by the War Finance Corporation were repaid. In March, 1919, Congress revived the corporation's activities by empowering it to lend not to exceed $100,000,000 at any one time, to aid American exporters or American bankers who had financed American exports. In May of this year the Secretary of the Treasury suspended its operations on the technical ground that its time for existence, as specified in the Act of Congress creating it, had expired.

Congress is right now considering a bill to revive the foreign trade financing activities of the corporation. The administration, as voiced by Secretary of the Treasury, Mr. Houston, is opposed to its revival on the ground that it will be an instrument of further inflation of credits in the banking system, and maintains that the government should be getting further out of the banking business instead of going in again. However, the War Finance Corporation is a going concern, with its funds still intact, and is therefore a workable piece of temporary machinery, oiled and ready to function. And if the further sale of bonds of the corporation is made to the investing public (and by this I mean investors such as are in the habit of making long-time permanent investments in land, mortgages or long-time bonds), and if said bonds are not sold to the banks, then its operation will be sound economically. We may hope for an early betterment of conditions within a few months after Congress acts.

But keep in mind, please, that the revival of the War Finance Corporation will be a temporary expedient, in order to get the wheels turning, and that the real permanent economic relief will come from the successful launching of Edge law corporations.

Banks to Encourage Exports.

Early in November the bankers of the South met in New Orleans and formed a corporation under the Edge Law with a capital of $30,000,000. The capital has all been subscribed by the banks, each bank taking an amount equal to 3 per cent of its capital. This corporation will function largely in financing the exportation of cotton.

On December 11th there was set in process of organization under the provisions of the Edge Act a corporation with a capital of $100,000,000 to be known as The Foreign Trade Finance Corporation.

This organization is being sponsored by the American Bankers' Association, and it is noteworthy that on the committee on permanent organization made up of thirty men, three members hail from Iowa.

Resolutions adopted by the conference set down to guiding principles:

"Extension of credit by the corporation should be confined to countries where there is a stable government, and where there is an assurance of integrity of purpose.

"Operations of the corporation should be confined to financing for the benefit of future foreign trade."

The latter principle emanated from the agricultural interests. Its purpose was to prevent the unloading of some of the "floating debt" of $3,500,000,000 to $4,000,0000,000 owed America by Europe upon the new company. In other words, new foreign business, instead of liquidation of old credits piled up in seaboard banks is what the new corporation is established for.

The practicability of financing our export trade thru the organization of such corporations as are contemplated by the Edge Act is clearly expressed by the following statement of Senator Edge:

"The procedure under the prospective law is simplicity itself; it is merely the application to international trade of the accepted method by which John Doe sells his business to penniless Richard Roe, and yet obtains actual cash payment in the transaction. The American exporter or manufacturer may sell his goods to an impoverished foreign purchaser—a foreign government or a private concern. One of the proposed corporations then may accept collateral from the purchaser, acceptable to the Federal Reserve Board, and against this issue debentures to sell to investors, and the money so received will be paid to the American seller. Thru the powers granted to these proposed corporations, they may accept even mortgages on the plants or other real property of the purchasers. Thus a foreign concern in need of raw material may obtain it by giving a mortgage on its plant, and eventually by turning this raw material into finished product will be able to redeem its collateral and to put aside a little profit besides."

The granting of long-term credits, however, for periods beyond ninety days, which are much needed by the European purchaser of our goods, offers a far more serious situation and present facilities are admittedly inadequate. Let us suppose, for instance, that a corporation whose properties are in the devastated section of France desires to buy American machinery to start rebuilt factories in operation, and that it desires to buy on credit, giving as security for the purchase price, only corporate bonds which mature eight or ten years hence. Even tho satisfied as to the safety of the security offered as collateral for the extension of the credit, the American manufacturer is in most cases unable to carry it until maturity because this would tie up and deprive him, for many years, of the use of the capital which he requires in his business. Therefore the seller is compelled to lose the sale unless the bonds can be quickly converted into cash. It is possible here to relieve the situation by an arrangement made with a corporation organized under the Edge Act to take such foreign securities, advance the cash, and within such limitations as the law and the Federal Reserve Board prescribe, issue its own notes which could then be offered to the public for investment. By this method the purchaser at once receives the purchase price, and the European buyer obtains the goods. The credit is successfully passed to the American investor.

How to Raise the Money.

Now, the process of raising funds with which the Foreign Trade Financing Corporation will do business is simple in manner but perhaps a little more difficult in fulfillment. First of all, the $100,000,000 of capital will probably be raised by the banks and the large manufacturers of the country, and by this process that much money will be taken out of the current channels of short-time credits and thereby cripple our banking facilities to just that extent. This may be a slightly painful operation, but the end justifies the means.

But the real big body of the funds will be raised by the sale of debenture bonds issued by the Foreign Trade Financing Corporation. These bonds will be the long-time securities, probably running for ten years, and will be secured generally by the assets of the corporation, such as mortgages, bonds, and other securities which it takes from the borrowers in Europe, and other countries.

These bonds can be issued to the extent of $1,000,000,000, and there is a broad intimation that each particular state, or other geographical division, will be financed to the extent and in proportion of the amount of these bonds purchased by the investors of that particular community. In plain language, this would mean that if the state of Iowa and the agricultural interests of Iowa are to be financed by this big corporation to the extent of, say, $100,000,000, it will be necessary to sell $100,000,000 of the corporation's debenture bonds to the long-time investors of this state—people who have been in the habit heretofore of investing in land, mortgages, stock, and other long-time securities.

In other words, if we are to get foreign finances on a really sound economic ground, and the plan of the Edge Law corporation is sound economically, the process is going to be accomplished thru the savings of the rank and file of the common people and not thru access to the mysterious and mythical millions of a few rich men in the East, nor thru the uneconomic further government borrowing by issuing war bonds, and its consequent danger of inflation of our banking system. It will mean close and careful saving by every man, woman and child, first, thru the accumulation of small sums in our banks, with the accumulation of interest thereon, until such amounts reach a thousand dollars or two thousand dollars, and then the reinvestment of same in the debenture bonds of the Foreign Trade Financing Corporation.

There is nothing mythical about it, but the result will be not only the enabling of our country to hold its position as the largest creditor in the world, not only the return of prices of farm products to a stable and profitable price level, but also the increasing self-respect and development of character which will come to all of the people as a result of increased personal thrift and saving.

You may begin to look for better days as a result of the preliminary functioning of the War Finance Corporation, if so authorized, and as a result of the permanent development of Edge Law corporations. The price plane is ready to start up again, and while it may be a little slow in developing speed enough to rise very rapidly, anything that insures its rising will be beneficial to business generally.

A few days ago I heard a prominent author remark that "We can see thru our glass darkly when we attempt to look into the future, but it is awful how clearly we can see when we turn the glass around and look into the past."

Problems of Local Financing.

And then while the corn belt is doing its share in contributing its savings and accumulations toward working out the big problems of foreign trade, perhaps we have some problems of local financing to be worked out in a way and manner which has not been heretofore attempted. Just as our present banking system has proved adequate in the short-time financing of our agricultural products, and has fallen down when put under the burden of long-time financing, just so do I believe that it may become necessary to work out some more adequate plan for long-time financing in connection with the production and marketing of the products of the corn belt.

Our immediate problems seem to call for some sort of a financial organization (and I do not believe it needs a banking organization, but rather a debenture bond issuing corporation) for the purpose of financing live stock thru the growing period preliminary to the finishing or feeding period, and the organization of another corporation for the physical handling as well as the financing of our surplus grain products from the threshing period thru to the normal marketing period to another harvesting. In my opinion, the latter type of organization will function wonderfully, provided it is not used as a means of withholding grain from market but simply for the purpose of stabilizing the flow of grain to market. These are problems to be worked out by organization such as the Corn Belt Meat Producers Association, the Farm Bureau, and other kindred organizations, and you will find the banker and his organization ready to co-operate in the working out of this problem on a sound basis.

One of the aftermaths of war is the creation of a general distrust of one man for another, but out of the general distrust we are going to come to know those on whom we can depend implicitly, and out of the wreck of disappointment in some men we are going to build a monument of faith in other men whom we did not know so well before.

I ran across a little poem the other day which perhaps typifies what we should do, and it runs as follows:

"A wood pecker pecks out a whole lot of specks
Of sawdust when building his hut;
He works like a nigger to make the hole bigger,
He's sore if his cutter don't cut.
He don't use the plans of cheap artizans,
But this much can truly be said,
The whole excavation has this explanation:
He does it by using his head."

(Laughter and applause).

So today, if we not only use our heads, but don't lose them, we are going to get thru. In closing I want to read this little poem by that present-day poet, Edgar A. Guest, of whom I am very fond. It says:

"Stick thru the heat of it, hammer and beat of it,
Play out the game to the end.
Stand to the test of it, making the best of it,
You have a name to defend.
Heart and soul go for it, you have a show for it,
Fight just as hard as you can.
But cherish no doubt of it, you can come out of it,
Failure or victor, a man.

"Make a fair fight of it, keep to the right of it,
Honestly battle to win.
But don't let the price of it, glitter and size of it,
Tempt you to shame or to sin;
Better by far to be short of the victory,
Better to bow to defeat,
Than falsely get hold of it, knowing the gold of it
Carries the name of a cheat.

"Hold yourself high above cheering and money-love,
Want something more than a goal;
Treasure your honest name more than a victor's fame—
Nothing can pay for your soul.
Then if you're beaten down, failing to gain the crown,
You can come homeward in pride,
Smiling and head-erect, owning your self-respect,
Knowing that truly you tried."

I thank you. (Applause).

The Chairman: I think we are really indebted to Mr. Wilson for his entertaining and illuminating talk. His illustrations were particularly pat. With regard to his airplane illustration, I think some of us have felt that probably we fell out of that plane just before it started down (laughter), at least, so far as agricultural prices are concerned.

I like the note of optimism in Mr. Wilson's speech, and his reference to the woodpecker is our only way out—we have got to use our heads; and I want to call your attention to the fact that it was a "red-headed" woodpecker. (Laughter and applause). We are going to do that, the farmers of Iowa have always done that, and we are going to make out all right.

Now we are going to hear from one of our old friends. During the course of the evening, I saw him fussing with three different sets of papers. He first started in on this book. I don't know what it's for, but I suspect that he has his speech in that; and then he began to fuss with this roll of papers, and I concluded that the book was something that he had just temporarily examined, and that this was really his speech; and then you may have noticed about fifteen or twenty minutes ago he got up and got a bellboy and gave him something, and subsequently the boy came back with a great big satchel full of papers. (Laughter). So I don't know which his speech is, but I do know this, if it is not in this book or in that folder or in that satchel, it is in Thorne himself, and he will now proceed to get it out of him. (Applause).

THE TRANSPORTATION PROBLEM.

By Clifford Thorne.

I suppose some woodpeckers can carry all of their stuff in their heads; I can't, I have to bring my satchel along. (Laughter). The fact is, I thought this fellow was going to get thru too soon and I didn't have enough material to carry me until my train leaves. (Laughter). The chairman told you that my train leaves at 1:20. (Laughter).

I am always glad to get back amongst my old friends here in Iowa. At the present moment we are in the midst of a period of gloom and despondency, altho we like to meet each other. We are conscious of a depressing situation in industry generally, such as is unparalleled in my memory. There are several forces that have helped to bring this about. Persons looking and thinking about one thing have a tendency to remember that there are other things and forces in existence besides that one with which they are at the moment concerned.

With the enormous population over in Europe at work in war enterprises and in the armies, there was a tremendous demand for all the products that industry and agriculture could supply; but when that body of men got back to work on their farms and in their factories, to a certain extent it was natural for that unprecedented demand to fall down. I am told that today there are between one-third and one-fourth of the population in Germany without the means of subsistence. I am told that there are 15,000,000 people in China who are starving, and only about 500,000 can be saved. That is not due to the war, but that catastrophe happens at the same time that these other incidents occur. I am told (I don't know how accurate it is) that there are something like 3,000,000 people in this country that are out of work. I am told that there has been a tremendous change in money exchange, creating havoc, chaos, ruin. We have witnessed governments overturned; the falling off of demand for our surplus from across the waters. All of these different factors have contributed toward the result of which we are tonight conscious.

And while I would like to discuss some of those other questions—finance, corporations, efforts to bring about credit relief, and so on—I am going to try to avoid spreading out too thin; I am going to concentrate a little bit on a few specific problems with which I have had to deal during the past year. I have served as your attorney and you are entitled to a report of the work that has been done. But before I close, I do want to discuss briefly some of these other subjects that have been challenging my attention during the past twelve months.

We are entitled to discuss our own problems specifically to see if we are receiving our fair dues. I want to make a comment or two about the Federal Reserve Bank. I want to make a comment or two about our railroads, and how our government has treated them as compared to the way we have been treated. You know, the thought runs in my mind that the production of food is pretty nearly as important as the production of transportation! I am going to talk about those things rather frankly. First as to my report:

Freight Cases Handled.

The most important case that has been handled during the past year was the 1920 advance rate case, involving some $1,600,000,000 annually. The commission granted much more than I thought the railroads were entitled to; nevertheless, there are two facts worth remembering—first, the railroads originally asked for a return on a valuation of $20,600,000,000. That is not the figure stated in the decision of the commission, but that is the figure upon which the railroads relied. (It will be shown on page 30 of the report.) The commission reduced that by $1,700,000,000. Six per cent on that is equivalent to approximately $100,000,000 annually. Of course, that is a small thing these days of billion-dollar affairs, but it was somewhat worth while.

Second—at the beginning the railroads tried to force the entire burden on freight traffic. The farmers' products constitute about 15 per cent of the tonnage of the United States, but the farmers also comprise about one-third of the population. I think the average farmer consumes more machinery, more lumber, more fuel, more of merchandise, or the products of the country generally, than the average man in the city. Incidentally, folks, you have a pretty important industry. The value of our farms has been estimated to be greater than the total value of our railroads, the total value of our factories, and the value of all of our national banks—all put together. Our factories, railroads and banks combined do not equal the value of agricultural lands in the United States. It is rather important! You are bearing, I think it is fair to say, one-half of the transportation burden, considering the fact that the average farmer consumes more of the tonnage handled by the companies, on the average, than the man in the city. Considering the fact that agricultural products, etc., constitute 15 per cent of the tonnage, the two combined, and other factors, have led to that estimate.

Now, it was important that the burdens of freight traffic should not be too heavy. It was our thought that passenger traffic should bear its fair share of the burden. During the progress of the hearings we asked for a statement relative to the earnings from passenger rates compared to freights. The railroads said it would be impossible to produce such figures. We insisted upon it, and we finally got it. We made such good use of it that the chief counsel for the railroads finally announced they would agree that when the wage advance was put into effect that there should be an advance in passenger rates. This resulted in relieving freight traffic of approximately $300,000,000 annually. Combining the two factors, the reduction in the valuation and the relieving of freight and placing that burden on passenger traffic, relieved freight traffic of approximately $400,000,000 annually, or a little bit over $1,000,000 a day. So much for that phase of it.

On the other side of the ledger we have this situation: The commission adopted a value which is about $5,000,000,000 greater than the market value of the railroads, according to sales on the exchanges of the country. In other words, at a time when railroad stocks and bonds were not worth 75 cents on the dollar, the commission adopted a valuation that was $1,000,000,000 greater than their par value.

The New Railroad Law.

The second most important development of the year related to the transportation act. When I was here at your last annual meeting, you will remember the joint committee was just reporting their recommendation. Since then the act has passed congress. I am not going to review the various provisions, but I am going to summarize it briefly.

First, the senate bill originally proposed a transportation board to take over many functions of the Interstate Commerce Commission. We took the lead in calling mass-meetings of shippers in Chicago, and fought that very bitterly before the committees, in person, by letter, circular, etc. That feature of the bill was eliminated.

Second, there was a provision with regard to loading and unloading of live stock. The railroads were beginning to make extra charges for each particular service, and they had selected live stock to add a loading and unloading charge to the rates which you had previously paid, which we thought covered the entire service. I think perhaps live stock was the only industry in the United States that received a special mention in the act. And in that connection I want to say that the preservation of organized live stock men I think is very important. Whatever may be my connection with your organization, I do not think it would be advisable to abandon the Corn Belt Meat Producers' Association or the National Live Stock Shippers' League. Why? Because an industry can fight its individual battles more efficiently than the entire group of people. In the Live Stock League you have gathered together the representatives of the producer, the packer, the exchanges, all branches of the live stock industry into one compact organization. Notwithstanding the rivalries, jealousies and bitterness between the various parts of the live stock industry, the Live Stock League can stand thru its representatives before a congressional committee or before the Interstate Commerce Commission, and say: "We speak for the entire industry." I think that is very much worth while.

The third proposition is with regard to compulsory consolidation of railroads. The original senate bill provided for compulsory consolidation of all our railroads—twenty-five or thirty systems, within a certain length of time. We thought that was unwise. What is the most important part of private ownership you want conserved? You have gotten rid of competition in transportation when you consolidate. Now you have some vestige of it—why destroy that? That section was eliminated in conference.

Fourth, federal incorporation. The original senate bill required the federal incorporation of our railroads. A fight was made on that; it was eliminated.

Fifth, the reduction of government guarantee, so-called. Originally the senate bill provided for practically a permanent guarantee; then it was reduced to five years, and then we succeeded in getting it reduced to two years.

Sixth, the re-establishment of the powers of the states. The house bill went wrong. The senate bill was in our favor, retaining the powers of the states. There has been much attack on that proposition of late. There would have been rulings of the Interstate Commerce Commission to the effect that the bill undertook to destroy and eliminate the powers of the states. Senator Cummins came out in an interview on the subject in the Wall Street Journal in which he said there was no attempt whatsoever to change that jurisdiction as it had previously existed. Alexander Hamilton, at the time our constitution was being framed, took the position that the greatest danger in the future would be that the states would destroy the powers of the federal government; that it would be very easy for them to grow stronger until they would weaken and demoralize the central government if any conflict between the two came up. Alexander Hamilton certainly misconceived the future. However, conditions at that time might have indicated that tendency. It possibly took the Civil war to kill off that possibility. At the present time the tendency is in the opposite direction, and I think this other tendency is just as fundamentally wrong and unsound as the prior tendency toward too much decentralization. (Applause). A government that is close home, a government that reflects the wants and needs of the local community, is going to live on; and, as I have said repeatedly before, I feel that the great distinguishing feature of our government is the combination of the central power and local self-government. We must preserve the two. That check-and-balance that we have created on this continent is unique in all government history. Within even the last few days I have noticed an account of developments in France to the effect that at the present time the leaders are contemplating greater autonomy, analogous to what we have in this country. I think you will agree with me that if they had more federal government in the British Empire, it would be on a sounder basis today, with the trouble they are having with Ireland. And I believe that we should profit by experiences of the past in our country and other countries, and preserve this.

If the Interstate Commerce Commission decision stands, which they are now rendering, entirely emasculating the powers of the state commissions, it is up to you gentlemen to bring pressure on Senator Kenyon and Senator Cummins and on our congressional representatives, and see that the transportation act is amended.

Seventh, with reference to the pooling of earnings. Originally there was a provision of the law providing for the pooling of earnings. I think that is incorrect. As long as the railroads are not permitted to pool their earnings, their success and prosperity depending upon their own efficiency, aren't you going to have a greater initiative? If they pool their earnings, will not the effect be to relax in their struggle for personal ascendance and development? That part of the bill was stricken out.

Eighth, the extension of time for bringing action. We suggested during the war period there was so much confusion that many claims had piled up unsettled—persons really didn't know what would be the outcome; the railroads couldn't attend to the settlement of claims; they had too much else to attend to. We suggested that the war period should be eliminated from the statute of limitations. Senator Cummins drafted a provision of the measure along that line and it was enacted.

Ninth, the joint use of rail and water facilities. That was a very important phase of the bill that was to be transferred to the new transportation board. It is taken from them and given to the Secretary of

War. However, on one section of the bill we failed ignominiously, and that is in regard to Section 6.

I don't know, I may be violating the sanctities of the occasion by mentioning that, but I will speak of it briefly. I think this is one of the finest examples of the effect of organization that I have witnessed in recent years, in support of their contention under Section 6.

Section 6 is unspeakably the result of a masterly organization and propaganda carried out thruout this country to a successful conclusion.

Day before yesterday I picked up the Chicago Tribune, and in there, in the financial columns, I read a statement about the Federal Reserve Board issuing some bulletins to the public, or to member banks, that aroused my interest. This is going to be connected up in just a few minutes, if you do not see the connection now.

"The seventh federal reserve district is largely agricultural, and, while Iowa is at the moment under a greater strain than other states, basic conditions are largely the same in all sections," the letter states. "Rediscount carried by the reserve bank for member banks must be repaid promptly. The law obligates the federal reserve bank to be prepared to grant re-discount equitably to each and every other member bank."

Now, just a moment! I want to give the authority for this statement first.

"A plea, but at the same time a veiled demand that farmers and country banks in the middle-west agricultural sections liquidate their loans was sent out yesterday by the Chicago Federal Reserve Bank to the banks in the seventh federal reserve district. The letter stated that complete liquidation is not sought, but only an immediate beginning."

Now I will proceed further:

"The reserve bank may grant and has willingly granted to some institutions in certain localities, but no institution or locality so favored should assume that, once granted, these extraordinary accommodations may be carried indefinitely, dependent for their liquidation solely upon the pleasure of the original borrower. The payment of deposits and the granting of seasonal demands yet to come are dependent upon the liquidation or reduction of loans now held by banks.

"To urge complete liquidation immediately is as unwise as it is impossible, but a beginning of the process at once is imperative, and upon its gradual and orderly continuance is dependent the future welfare of the banker, the depositor, the merchant and the farmer alike.

"At the banker-farmer conference held in Iowa during November, the opinion was frequently expressed that the farmer alone is feeling the force of the after-war readjustment now in process. Conditions in other lines of business indicate that this opinion is not well founded. It must by this time be evident to all fair observers that the readjustment process is in evidence in practically all lines of commerce and industry, and the balance sheets of January 1st will undoubtedly be convincing proof of this fact."

Now, let's see about that. I think that you are conscious how your balance sheet is liable to look on January 1st. (Laughter). I don't need to dwell on that phase of it. It says "the readjustment process is in evidence in practically all lines of commerce and industry." The railroads are quite an industry in the country, aren't they?. The second in importance in America, next to agriculture.

I have in my hand here a statement—I don't like to have you folks take my own personal statement too much, because when attorneys or statisticians and folks get to talking on two sides of a proposition, they are liable to lose the confidence of the public. I suppose sometimes you think both of them are straining things somewhat, and can hardly be trusted, when you hear people arguing on both sides of a proposition. That is why I like to give the authority itself, and that is why I lug my papers and documents along with me when I go places.

Some time ago there was a colonel at the head of a regiment here in the United States somewhere, and a darky soldier come into the colonel's tent one day and said: "Colonel, suh, I's gotta have a pass, my wife's sick an' she's going to die; I gotta go to see my wife." The colonel said: "That's the same story you gave me last week, isn't it?" and the darky replied: "Yes, but Colonel, I's just gotta go; she's in miserable shape. I got word she's not expected to live." The colonel said: "That's all a lie; I saw your wife yesterday, and she said she didn't want me to be giving any more passes to you; she's just as well as any woman." And the darky says: "Colonel, was it my wife said that to you?" And the colonel replied: "Yes, sir, your wife." "Are you sure?" insisted the darky; and the colonel answered: "Yes, sir; she said it was true you had been lying about it, she wasn't sick at all; you came home and beat her up, and she didn't want you coming home any more." The darky saluted and said: "All right, all right," and he started to leave, and just before he left the tent he turned around and said: "Colonel, you and I are two of the blamedest liars in this whole army. I hain't got no wife and never had one." (Laughter).

Sometimes it may be that you think that folks quoting statistics and statements on both sides are liars. (Laughter). I am not going to ask you to take my word about the effect of the transportation act upon railroad earnings, but you folks have heard, haven't you, that it didn't increase railroad net earnings. You have also heard, haven't you, that that advance was asked and given to take care of increased wages? I have in my hand a bulletin issued by the railroad executives of the United States, under date of November 18th, to the following effect:

"A compilation completed today by the Bureau of Railway Economics—which is supported by the railway executives—shows that the net operating income for September for Class A railroads of the country fell approximately $29,000,000, or 26.9 per cent, short of the amount expected to be earned under the increased rates fixed by the Interstate Commerce Commission in accordance with the transportation act. The figure is based on reports from 207 railroads of that class, having a total mileage of 237,899 miles. The net railway operating income for the roads for September totals $78,876,000, a gain of only 2.8 per cent over that for the same month in 1919. Despite the increased rates, it was also approximately $4,800,000 above the standard return which the railroads would have received had they still been operating under the guarantee provided for them in the transportation act, but which ended on September 1st."

Remember, for the first month under the effect of the new law, their net was $4,800,000 greater than provided under the guarantee during the war period, and yet they fell 26.9 per cent behind the amount authorized by the commission as the commission interpreted the transportation act—26.9 per cent below what the commission thought they were authorized to grant under that act, and yet $4,800,000 greater than the same month of last year, or the same period under the war guarantee.

What the Roads are Earning.

Now, whether it is the transportation act, or whether it is the commission, just think a moment! Isn't that somewhat different from your situation? So far as the federal government is concerned? Isn't it somewhat different when we say that their net is $4,800,000 greater than the government guarantee? It was greater than what they earned last year by that amount, and yet it was 26.9 per cent less than what you are obliged to give them. The harder it is for you and me to pay the rates, the less traffic moves, and the higher the rates will have to be under that system. How are you going to make up your 6 per cent net when your tonnage falls down, if you do not increase rates? That is the cost-plus system. That is the system, gentlemen, that was found so unwise, so fatally wrong, during the war period. I think it is fundamentally and economically unsound and unwise; it served as a blanket on American industry; it is one of the contributing causes about which we have been speaking. I think that in the very near future we should demand the repeal of the transportation act of 1920; we should demand the repeal of that section, and we should demand the reopening of that case. When you force a commission to make an appraisal of the American railroads at a time on data compiled from less than two per cent of the railroads of the country, they had to make some sort of a case, didn't they? When you force that case, the appraisal of our railroads, at a time of high prices as compared to what you have heretofore experienced, that is liable to be costly and burdensome for the future.

Repeal the Guarantee.

I believe most profoundly in the integrity and ability of our beloved Senator Cummins, and I believe that if he felt that you folks back home here thought that that law should be amended, it would have a great deal of weight with him; and I think before his term of office is out he ought to see that that thing is changed.

It is unfortunate for American industry that we should have anything savoring of a governmental assurance of guarantee. How has it been in the past? We have said in the past that rates had to produce a reasonable return. Yes. But we have said during periods of prosperity there could be built up a surplus to tide them over lean years. There is an ebb and flow in business just as in the level of the ocean. Suppose during the crisis of the panic of the '90's, when the railroads of the country became financially embarrassed, higher rates had been put into effect, wouldn't it have been unfortunate for America? That was not the situation. It has never been the situation up to the present time. During 1907-08 there was another depression. During 1914 there was another depression. And in 1914 we took the position, if you will remember, that the railroads must accept the ebb and flow of commercial conditions; they could not expect to go thru periods of depression earning profits when everybody else was failing to earn profits. We said we would like to have a government guarantee at that time; we said we would like to have congress pass a law insuring that our eggs were fertile and that our hens would hatch the eggs, and that we would have fair weather and bumper crops, etc.

The Interstate Commerce Commission, in the spring of 1914, in spite of the period of depression, denied the advance on over 80 per cent of the traffic, and in the winter of 1914 they granted it on 90 per cent of the traffic. Within three months thereafter the western advance rate case came up, and it was denied. That was in the east in 1913-14. The only point I am making is this, that as long as the railroads remain in private operation and in private hands, we must expect, and we must have them anticipate, periods of prosperity and depression. During periods of prosperity they can lay up funds to tide them over a period of depression without guaranteeing fixed return.

We have introduced an exhibit showing that their surplus as evidenced by moneys on hand, deposits in banks, the ownership of marketable securities, was over $800,000,000. It showed a bookkeeping surplus of over $1,000,000,000. And the Interstate Commerce Commission has specifically declared that to be one of the purposes.

We have heard a great deal about surplus, and in that connection last spring we went to congress and urged upon the senate committee an increase in the loans to railroads, if necessary, to buy additional equipment and engines. We thought it was better for the railroads to buy them with their own capital than for rates to be pushed higher so that we built cars and engines out of the rates we pay, and then we have to pay a return to them for what we built for them. The senate committee found they were not justified in granting additional loans. They based their conclusion upon such testimony as the following:

President Rea said that considering the $500,000,000 already authorized, plus what the larger roads could finance, it would exhaust the capacity of the mills and factories of this nation to build more cars and engines.

So what was the object of lending them more money?

With regard to service, some time we are going to be misled, and we should watch carefully our sources of information on facts. I have a statement here, a photograph of an exhibit Mr. Julius Kruitschnitt, of the Southern Pacific, who chanced to be on the stand one day toward the close of the case, and during the cross examination he referred to some sheets in his portfolio that looked sort of interesting from a distance, and we asked him if he would lend them to us a moment, which he finally did, and then we had them photographed. At the time Mr. Kruitschnitt was testifying that they were not going to be able even to pay their interest on their debt—that the great Southern Pacific was actually threatened with possible receivership. That identical word or its equivalent was used in the examination of Mr. Kruitschnitt on direct by his own counsel. This exhibit shows that there was a deficit apparently coming in the final figure; but it further shows—and anybody is welcome to examine it after I am thru at his leisure—that in order to produce that deficit he had to show the deficit of the Atlantic coast line steamers belonging to the Southern Pacific. In other words, in order to show the inadequacy of railroad earnings in the west, about which Kruitchnitt was testifying, he used the steamship lines running around the Atlantic seaboard to the Gulf.

One thing further it shows, and this I want you to remember, there is one item called "equalization of maintenance," of $5,000,000. That equalization of maintenance does not appear in the year 1919, but does in 1920. If you eliminate that bookkeeping figure of equalization of maintenance, that company earned more in 1920 than in 1919. Second, if you eliminate the Atlantic steamship lines—that is the heading on the exhibit itself, "Atlantic Steamship Lines"—it will further show that it wiped out the deficit completely and made a very substantial net profit.

With regard to this matter of service and the sources of your information. We have heard a great deal about the weak lines and the short branches and how hard it is for them to make both ends meet. I hold in my hand some exhibits and an extract from testimony of a nine-mile branch line in Oklahoma that was involved in a case I had this last year.

In this case the railroads presented a petition to the Corporation Commission to the following effect: That by reason of the present scale of passenger and freight rates, the Sapulpa and Oilfields Railroad is able to maintain frequent passenger and freight service for the benefit of shippers and passengers of said line; that by the continuance of said rates the St. Louis and San Francisco Railroad Company will be enabled to continue said service; but if it is required to reduce said rates to the basis of two cents per mile on passenger traffic and a corresponding rate on freight traffic, the St. Louis and San Francisco Railroad will not be able to continue such service.

They further got a petition signed by the citizens of Sapulpa, asking that the arbitraries be continued and that the higher rates be granted. Hearing was held before the commission, at which time was presented a petition signed by practically all of the business men of the town of Shamrock, asking for the continuance of the present rates. The attitude of the signers was undoubtedly influenced by the fear that a reduction in rates would also mean a reduction in service.

During the progress of this little case, which involved a reparation claim of $40,000, I put on the stand the man who built the road, and he swore under oath that it cost $157,000 to build it; that the first year was a boom year, there having been a large development of the land; they paid dividends to the amount of $60,000, and had left $165,000 net. Then they sold it to the Frisco Railroad for $157,000, plus 10 per cent, making $172,000. Cost plus 10 per cent. (Laughter).

Then I asked him to produce a statement of the balance sheet subsequent to the acquisition by the Frisco, and I happen to hold that in my hand. For the year ending December 31, 1918, they made $115,641 net;

for the year ending December 31, 1919, $104,527. They made over 60 per cent net over expenses and taxes both years.

I cite that not to prove that it is a typical railroad case, because it certainly is not. I cite it merely as a demonstration of the wisdom of taking any statement about the necessity of increasing rates for the purpose of improving service with a grain of salt, unless the situation is known to yourself or is vouched for by someone in whom you have confidence.

Must Have Good Service.

In building up our railroads, there has been antagonisms engendered because of bad faith in the past. We must take a broader view of things than to punish our carriers. That is a thing of the past. The public must have adequate service. I know of one man who bought a calf over here in Omaha and put it into a car and shipped it out to his shipping point in order to get a car to ship a load of cattle to Chicago. I know a man who lost over $3,000 on a carload of grain this summer because he couldn't get a car when he wanted it. I know these illustrations can be added to.

I know that adequacy of cars is more important than rates. If I want a watch—as I have used the illustration repeatedly before—I don't want a bum watch; I want a good watch or none at all; and yet there is a limit to what I will pay for that watch, isn't there? Simply because I want a good watch is no indication that I am willing to pay anything. And at the present time when you folks aren't making cost of production, you are laboring under a system which compels the payment of cost-plus to our carriers. You are living under the burden of paying more than you paid during the war period, plus 6 per cent on the investment.

Now do you ask, was the guarantee during the war period too low? Let us see. You take as a basis for the war period the average net earnings—and no man has ever yet successfully contradicted this statement. One attorney attempted to before the commission, and I challenged him to cite the period, and he didn't answer. You use for the basis of the government guarantee during the war period the net revenues for the most prosperous three-year period in the history of the American railways. It was so high, the guarantee was so large, that Senator Cummins filed a minority report protesting against it; and yet we have now added to that during the period of greatest depression that you people have labored under for many years.

I wish that I could have your time and your patience, now or hereafter, sometime, to sit down with you people and carefully, coolly and slowly go thru this matter, and see who is right and who is wrong. I think that the attitude of Iowa citizens is going to determine this thing to a substantial extent.

You have heard a great deal about credit. Of course, they must have credit. Now, what happened about credit? During the last one of that three-year period, Mr. Oldham, of Boston, was the leading banker who took the stand. On cross-examination, under oath, Mr. Oldham admitted that the railroads had been able to borrow money at a better rate of interest than any other industry in America. A leading expert from New York, appearing as a witness for the bankers, admitted that his own exhibit proved that the railroads every year for the preceding fifteen years as a class had borrowed money at a better rate than other industries generally.

I can give volume and page for every one of these statements, and we challenge any man here or hereafter to question their accuracy, and that was at a time when you were making your test period your basis for your government guarantee.

Even at the last hearing, in 1920, Mr. Strauss, from New York, was on the stand, the only witness who attempted to testify as to railroad credit specifically as a whole, and he was asked if he knew about certain figures that had been testified to about the rate representative railroads had to pay for money, and he was asked to name any other company in any other business that had been able to borrow money at such rates, and he said, "Yes, I can name several if you will give me time, and will do it before I leave the stand." I paused and waited, and then said, "I would like to have you do it." He didn't do so.

There were some exceptions, but as a class that is the situation.

I take this very seriously. I do sincerely believe that while we succeeded on the other sections of the bill, a person ought not to object too strenuously on the particular section we did get defeated on, but I still think we were right.

Live Stock Rate Cases.

During the course of the year we have had several live stock cases. There is the liability clause case. The railroads got the National Industrial Traffic League to agree to a revision of the industrial track agreement for the future, so that the railroads were relieved of all liability for loss by fire occasioned by engines serving their industry, altho the engine was owned by the railroad, and altho the railroad was negligent. The National Industrial Traffic League consented to that form.

Second is the valuation matter. The commission has called for valuation data for only two roads. At the present moment the Interstate Commerce Commission is framing a valuation that will be the basis of all of the rates during this generation and for generations to come. If it is excessive, you and your children will pay the tax, and your children's children, whether you have government ownership or private ownership.

The Interstate Commerce Commission held that the railroads were not entitled to the land multiple; that it was not necessary to find the cost of acquiring land today. Do you know what the land multiple is? Today a railroad, when it acquires land, has to pay two and one-fourth times the cost of the adjoining land; not the cost of the adjoining land, but two and one-fourth times the value of the adjoining land. Therefore, they should multiply the present value of the land by a multiple, and that is what is contemplated by the act, which requires them to find the present cost of reconstruction.

The Interstate Commerce Commission turned them down on that proposition, and the Kansas City Southern case was appealed to the supreme court of the United States, and the supreme court reversed the Interstate Commerce Commission. In the Minnesota rate case the supreme court had previously held that the railroads ought to be satisfied if they got the present value of adjoining land.

We think that the transportation act ought to be amended in regard to that proposition. That involved several hundred million dollars.

Secondly, as to going value. Mr. Prouty, who was one of our best champions in the country at the beginning, has changed his notion about the railroads being entitled to going value. That will add about 12 per cent if the commission adopts his view. If the railroads are worth $20,000,000,000 that will be another $2,000,000,000 or so on which you pay 6 per cent annually, which makes $120,000,000 or $150,000,000 a year.

The third proposition is mixed shipments of live stock, which is pending.

Fourth is partition between mixed shipments. The subject of the rules and regulations of mixed shipments is going to be up for reappraisal before the commission.

Fifth, spotting charges. They are reviving the proposition of spotting charges at certain industrial tracks, and elsewhere.

Sixth is the live stock commission. We had that proposition up, and you people are familiar with it. There is considerable doubt in the minds of people whether the federal government has control of that. A number of years ago the supreme court held in the Anderson case at Kansas City that it was a set amount.

Seventh, minimum weights on live stock.

Eighth, spotting to unload. They are considering advancing those rates above what they have been.

Ninth, charging for feed. The railroads propose levying a rate on that; and they have just assured us they will withdraw that proposition.

Tenth, the two-for-one rule. There is an attempt on the part of one railroad to change that on the ground that it is being abused. I won't go into details with regard to that.

Eleventh.—Notwithstanding the general advance effective this last August, the railroads, on the 7th of December, just a few days ago now, thinking perhaps that live stock wasn't bearing its fair share of the burdens, put on another advance of 7 cents a hundred pounds on single-deck cars from the Missouri river to Chicago on hogs. Gentlemen, that is one case where we failed to catch the culprit before the decision had been rendered. Originally the commission had a case brought by the Indianapolis Chamber of Commerce in which they claimed that Indianapolis and Chicago were so competitive from Missouri river points in hogs that the Indianapolis rate should not exceed the Chicago rate by 10 cents.

In a previous case the counsel for the Indianapolis Chamber of Commerce admitted in the record that on a line drawn north and south from Chicago to St. Louis, Indianapolis didn't expect to be on an equality with Chicago; that it wasn't necessary; it wasn't her natural territory.

But here it seems that the Missouri river is her natural territory, and in the trial of that latter case no producers' organization in the United States that I can find was represented by counsel or by witnesses. I learned that after the decision had been rendered. I immediately asked for a re-opening. My request has not been granted; has not been acted upon, so far as I know. But in the meantime Indianapolis said we were crying before we were hurt, that the railroads would reduce the rate to Indianapolis instead of raising it to Chicago. Along came the 7-cent advance in rates on the 7th of December. And that will be reflected back and will also form the basis which will govern all traffic from the Missouri river, as you all know, and the commission denied the suspension.

The advances have gone into effect without even a hearing at which the producer had notice other than by a little printed three-line announcement, perhaps in some issue of the Traffic World, of some tariff that was to be filed.

Last year there were 143,000 freight tariffs filed. I try to keep a check on everything affecting live stock. It is not surprising that occasionally something of importance may get beyond me.

But isn't it the wrong system whereby an advance can go in without a hearing? We asked for a suspension under the law. The railroads aren't required to give you and me notice except the filing at Washington; but when we want a reduction we have to file our petition and serve notice on every railroad in the country that is affected. I would like to see it so adjusted that some sort of reasonable notice would have to be made on the shippers' organization when proper and reasonable request has been made therefor.

The Supreme Court and the Commission.

Another little phase of our present railroad legislation—the supreme court has held they can reverse the commission when an affirmative order is granted for an asset of a certain character, but they can not reverse it when there is a negative order granted. I think that is wholly unreasonable. And remember, the affirmative orders where they don't have the jurisdiction are where the carrier wins; but where they do have that jurisdiction is where the shipper wins. Where the shipper loses is where the supreme court hasn't the power to review the matter, as I have just described. That was held by the supreme court of the United States in the Proctor-Gamble case.

Co-operative Marketing.

One of the most important phases of my work at the present moment is in regard to co-operative marketing. You know that Mr. Howard invited a number of organizations to suggest certain members to serve on a Committee of Seventeen, and I was amongst the number selected. At the present time we are carrying on somewhat of an extensive investigation to find out just exactly what should be done. Now while the thing is at fever heat there is some danger of going off half-cocked, and yet we do not want to dilly-dally too long. We must reach conclusions just as quickly as possible, but when you look over the history of the wrecks and failures during the past fifty years in agricultural organization work, you certainly appreciate the importance of care.

Much has been said about the exchanges, the gambling and speculation. The other day we had before us the president of the Chicago Board of Trade. He made the statement that because there was gambling at an institution you should not discredit the entire institution. He said he knew of an instance where two men in a church bet on the length of a certain preacher's prayer during the service, and yet would that act condemn that church or services of that character? This thought occurred, however—what was the relative proportion of the two?

Mr. Gates admitted that the amount of speculation exceeded the other very greatly. In fact, I have been informed that there is forty times as much grain bought and sold on the Chicago markets as actually goes thru the market. And we asked Mr. Gates if betting on the length of the parson's prayer should exceed the other activities of the church by that ratio, we might decide to take some exception to reforming the situation. (Laughter).

Now, the practices on these exchanges have got to be reformed. We have got to do something about them. I don't know what it is yet. We have got to study it out.

When I was in Yale, Professor Sumner told our class one morning of a visit he had had from a commission of financiers from Japan. Years ago, one of his students became very much interested in his work and on his return to Japan continued his studies along certain lines, and during the course of years they created commissions to go about the world studying systems and practices in other countries, and in the course of their journey about the globe these men came to America. Professor Sumner had made a specialty of financial systems, and on this occasion this commission called on Professor Sumner and he advised them concerning a financial system which he thought would be adaptable to conditions in the Japanese Empire, on the opposite side of the globe, and in time he was informed that his system had been adopted.

A man without any influence, by sheer force of intellect, devised the financial system for an empire on the other side of the globe. And that practice of the Japanese of going about the world finding out the best in the different countries, it seem to me, is a very fine lesson in our present situation.

In handling our grain, we want to find and adapt to our own use the very best system that other folks have devised. We can not go off in a corner and think it out for ourselves; we must study the experiences of others; we must learn of their successes and their failures. We called before us a representative of the grain people; we had before us Mr. Powell, of the Citrus Fruit Association; we heard previously from a man from the south, and now I think we are ready to begin with our own work.

During the progress of our investigation a Canadian told us that on the actual cost of their country stations they had earned less than 1 per cent, but when they bought their elevators they had paid $600,000 more than they ought to, and they made last year just slightly less than 2 per cent on what the country stations were reasonably worth. He further stated that they earned 15 per cent on an average on their terminal elevators for a period of six years—annually 15 per cent. He told us further that when they went into the exporting business the first year they lost a million dollars, and the next year they employed an expert from Europe, and during the first year his salary and commissions approached $50,000—but what happened? He transferred a deficit of a million into a profit of a quarter of a million, and also reduced the margin from 5 and 7 cents down to 1½ cents on exports.

Now, how did he accomplish these things? What were his methods? Why did they lose out at first? Why did they succeed later? What is the essential difference between citrus fruit, the prune, the raisin growers of California, and the methods which those associations employ? Which is more applicable to your needs? How have the Equity people succeeded in St. Paul? How have the farmers' organizations in North Dakota succeeded? Those are the problems we want actual facts on.

Julius H. Barnes, who was the director of the Wheat Corporation during the war period, appeared before us, and he said he didn't believe that the margin on exports was reduced a penny, completely contradicting the statement of our Canadian friend. I don't know whether he is correct or not. Suffice it to say that we want to find out who was right. Mr. Barnes also told us that the farmer couldn't go beyond the country station successfully, that he wasn't capable of doing so.

You know, when a man comes to our committee and tells us—and, by the way, some folks say he is slated for the presidency of this new $100,000,000 bank—when a man comes before our committee and tells us that we don't know enough to handle our products beyond the country station, it serves to arouse us to action.

I think, if you will look over the past history of our country that you will find that some of our best brains have occasionally come from the farms. I don't believe any man knows what he is talking about when he tells us that we can not successfully go beyond the country station. (Applause). I do believe, however, that when you attempt this larger task, you ought to do it sanely and wisely. If you are going into an enterprise involving the handling of several hundred millions of dollars, oughtn't you to know the facts before you attempt to act? I think that that is one lesson we must learn, that we must undertake to secure expert assistance in gathering the facts, and then after we have gathered them we must have experts to assist us in the operation of the organization.

These agricultural movements and price-fixing attempts have been going on for years and years. Mr. Wallace told me a while ago that he thought that the examination of the files of agricultural publications of a half-century ago would show some editorials and news articles that could be published today, leaving out days and dates, and nobody would know but they were being written now, at the present time.

I have in this connection some sage advice that I want to give you; it will sound almost like Bolshevism as compared to some of the remarks we have heard recently. I don't know whether you have ever heard of J. Rufus Wallingford or not. Here is a speech that he gave in about 1906-07, to a bunch of farmers:

"Flushed with pleasure, beaming with gratification, the most advanced farmer of them all arose in his place and requested of the worthy chairman the privilege of addressing the meeting, a privilege that was granted with pleasure and delight.

"It was an eventful moment when J. Rufus Wallingford stalked up the middle aisle, passed around the red-hot, cannon-ball stove and ascended the rostrum which had been the scene of so many impassioned addresses; and, as he turned to face them from that historic elevation, he seemed to fill the entire end of the schoolroom, to blot out not only the teacher's desk, but the judges' seats, the blackboard and the four-colored map of the United States that hung upon the wall behind him. He was a fine-looking man, a solid-looking man, a gentleman of wealth and culture, who, unspoiled by good fortune, was still a brother to all men. Already he had gained that enviable reputation among them.

"Friends and neighbors and fellow-farmers, it was startling to reflect that the agriculturist was the only producer in all the world who had no voice in the price which was put upon his product."

Doesn't that sound natural? (Laughter).

"The manufacturer turned out his goods and set a price upon them, and the consumer had to pay that price. And how was this done? By the throttling of competition. And how had competition been throttled? By consolidation of all interests in any particular line of trade. Iron and steel were all controlled by one mighty corporation against which could stand no competitor except by suffrance; petroleum and all its by-products were in the hands of another, and each charged what it liked. The farmer alone, after months of weary, unending toil, of exposure in all sorts of weather, of struggle against the whims of nature and against an appalling list of possible disasters, himself hauled his output to market and meekly accepted whatever was offered him. Prices on every product of the soil were dictated by a clique of gamblers who, in all probability, had never seen wheat growing nor cattle grazing. Friends and neighbors and fellow-farmers, this woeful condition must end! They must co-operate! Once compacted, the farmers could stand together as firm as a rock, could demand a fair and reasonable and just price for their output, and get it. Today wheat was quoted at 94 cents on the Chicago Board of Trade. If the farmer, however, secured 82 cents at his delivery point in actual cash, he was doing well. There was no reason why the farmers should not agree to establish a standing price of a dollar and a half a bushel for wheat; and that must be their slogan. Wheat at a dollar and a half!

"He was vitally interested in his project, and he was willing to spend his life and fortune for it; and, in furtherance of it, he invited his friends and neighbors and fellow farmers to assemble at his house on the following Saturday night and discuss ways and means to bring this enormous movement to a practical working basis. Incidentally, he might find a bite and a sup and a whiff of smoke to offer them. All those who would attend would please rise in their seats.

"As one man they arose, and when J. Rufus Wallingford, glowing with the immensity of his noble project, stepped down from that platform the walls of the Willow Creek schoolhouse echoed and re-echoed with the cheers which followed his speech."

The Same Old Story.

Folks, we have been listening to that song for fifty years. We have had a revival along this line every ten or fifteen years, and up to date what has been accomplished? Out of the present wreck of things, can not we by some use of gray-matter, devise something that will stick? There is one thing that has been accomplished—the little country elevators over these grain sections have finally mastered the situation so far as local traffic is concerned; they are driving out the line elevator. There are today 4,600 co-operative elevators in the grain belt. Notwithstanding the sage advice of the distinguished director of the Grain Corporation, the Committee of Seventeen yesterday unanimously passed a resolution that in their judgment the time had arrived when the farmers should go beyond the country station in the marketing of their grain; that they should do so, that they could do so, and that they are now going to take the necessary steps to see that they will do so. (Applause). But in doing that, it is important that no contractual relationship shall be entered into that will embarrass the success of our movement. Nothing must be done that will hamper or retard our success.

If I may be permitted to do so, I would say that we have recently employed a couple of accountants from Washington, D. C., of the very highest standing and ability; we have one or two other men employed along other lines; and we have already sent people to California and Canada and St. Paul and Michigan, and within the next few months I hope that we will devise something that will be workable and practicable.

The Pittsburgh-plus case is one more case of very great importance that we should have told you about; but I am not going to take your time.

The inland waterways development is another project that should receive the strongest backing from the agricultural interests of the country. In going over these subjects that must not be forgotten.

Now in conclusion, I have a feeling that at this Christmas-tide it is not all gloom. I am an optimist, anyway—cheer up, the worst is yet to come. (Laughter). At the present time, we are at least going, as our minds are diverted temporarily to other affairs in this time of hardship and suffering, to little acts of kindness that we see about us that may help to dispel the gloom.

Now, during these days of struggle, strife, turmoil and hardship, we must not forget our fellowmen; we must keep our heads cool and we must act sanely and wisely.

I thank you. (Applause).

WEDNESDAY, DECEMBER 15, 1920.

MORNING SESSION.

The Chairman: Let us come to order now, gentlemen. We have quite a long program, and a good one, so let's get at it.

We begin our work this morning with a talk on the Farm Bureau Federation. The program this morning as printed begins with Mr. Thorne, but those of you who were fortunate enough to hear Mr. Thorne last night were glad that you were at the banquet, for he said something. So this morning we will begin with a talk on the Iowa Farm Bureau Federation by Mr. Hunt.

THE IOWA FARM BUREAU FEDERATION.

By C. W. Hunt, President.

I am scheduled on your program to talk to you awhile about the Iowa Farm Bureau Federation. I might say that we have had organizations of farmers more or less for the past fifty years, perhaps farther back than that; they have come, had their day of prosperity, some of them have entirely subsided, others are still here. I would not say that those organizations springing up had been failures; I believe they have done some good. I know that we have the idea that we are talking too much, that we haven't done anything in the last fifty years but talk, yet at the same time I believe that a great deal of good has been done by the Grange and others I might name that have been doing good along the line of elevating the farmer to a better position in this world.

We have not succeeded in the big objective point, however, and a lot of us have faith that the Farm Bureau Federation, together with these other organizations—I believe I will call them commodity organizations—that we now have are going to finally get a definite program that will work and will get for the farmer a chance to name the price of the products that he produces; a chance to have something to say, at least, as to the selling prices of the products that he produces. It seems to me that is our big aim, and I have faith in this federation as it is now organized. We will have some troubles, of course; we will have to lay aside some prejudices that we have.

We have got a big work, men, to do; we have got to have men of force and experience in gaining knowledge of the other fellow's business who can give us figures and statistics of the world's markets, of our own markets, and of general business conditions. It seems to me we finally have got to reach the point where we will all get around the table, as the saying is, and lay our cards on the table face up. We can not do that now, because our cards haven't any spots on them. When we get the spots, we can go with the other classes of business and make them come out in the open.

We are not keeping our figures under a bushel. Maybe we have been too communicative about our business; maybe we have let the other fellows find out too easily. They know all about it, but we don't know about their business, and that is the big job, it seems to me, for the Farm Bureau Federation, getting those figures, and finally developing a plan to take care of and control the marketing of the products that we raise. We produce them, and why haven't we a right to market them? The other fellow markets his products and he fixes the price that he gets for it. You know the old saying, "What goes up must come down." I guess that is absolutely true. The question is, how high the thing is going up; how long will it hold there; when will it start down; how fast will it descend, and with what velocity will it strike the bottom?

Prices Not Reduced to Consumer.

Some of the head men at Washington have said that this thing had to come, it was inevitable, and there wasn't any help for it; that there is no use giving the farmers assistance in tiding this period over because it will increase the cost of food to the consumer, and they don't want to do anything to bring that about. My reply is that if the prices of foodstuffs have been materially decreased to the consumer, we haven't yet been able to find it out.

When I was home a few weeks ago—and I do get home occasionally—I went to the local butcher to get a pound of bacon, and he said: "What kind do you want?" and I said, "I want some bacon I can eat; I don't want any sow-belly painted with smoke," and he showed me a pound of bacon, best grade, of course, and charged me 65 cents for it. I said: "Say, isn't that pretty steep?" He said: "I can't make a profit on less." I said: "What do the packers charge you for this stamp?" He said: "I pay the packers 60 cents a pound for that bacon, and if I can't get 5 cents a pound for handling it, I will have to go out of business." I replied: "If that is your story, that's all right; I'll take that for granted." I don't believe he was lying to me, but somebody has lied somewhere along the line of this propaganda. The packer says he hasn't made any money on this proposition; the butcher says he is not making any; but I want to tell you that the feeders in the state of Iowa well know they have lost money and somebody has got it. (Laughter.) Now, the question is, who got it?

I know of men during the war who sold their corn and got a fairly good price for it, and yet it was produced by high-priced labor, and when you figure it all out they didn't get a whole lot of money. Men have said to me: "The farmers of Iowa had a good thing for the past three years, and it was up to them to lay by something for this reconstruction period, and if they didn't do it, it is up to them." Let's see about that. If you sold your corn for $1.75 a bushel, which was the price if you were lucky and got in on the top shelf, who did you sell it to? The chances are you sold it to your neighbor, who was feeding cattle and hogs, and he fed that out, and he was lucky if he got 75 cents a bushel out of it.

Farmer Has Not Had Fair Show.

I'll tell you what the farmers did when they got into this war—they naturally got enthusiastic and overdid the thing; but the farmers of Iowa today have come down to earth, they have hunted up the old milk stool, gone out to the old brindle cow, and are today milking that old cow and separating the milk and watching for that cream check; they have turned their attention to Biddy, and they are watching the old hens, and they are culling out the non-layers and getting their flocks down to a scientific basis so that their hens will pay their way, and they are depending on the cream check and the egg basket to bring them in a living, and they are going back to the 16-hour schedule they used to follow to bring them back again. And we will have to do this until we get these problems solved, so that we will have a chance to say something about the price that we get for our stuff.

Must Learn to Fix Prices.

Do you know that that law of supply and demand has applied to the farmers products this year? So far as the farmers are concerned, the supply is what controls; when we have a large surplus of stuff to sell, we are told that demand has fallen off; but demand comes back again strong the minute that stuff gets into the hands of the speculators, who then hold it for higher prices and turn it over to the consuming public at greatly increased prices.

Now, it is our job to get in a position where we can study the demand, where we can estimate the demand, and where we can have some idea of the supply and fix our price just the way the other fellows fix it, at a point as high as we can do it in order to have the demand carry away that supply. In other words, in place of having the board of trade down at Chicago fix the prices, we will fix them when we get those products where they belong. I don't mean that we can arbitrarily fix prices; I don't mean that cost of production is going to be an absolute solution of what the price will be, but I do mean that we can fix them according to our determination of the supply and the demand. If we guess wrong, then we will simply have to hold in storage some of the stuff until there is a time that it is wanted. I believe that the Lord has been trying to help us along this line for a long time, but the trouble is the Lord has been a little too hard on certain conditions. You know, when we have a bumper crop, prices go down; the next year we might put in some acreage to replace the elements that were taken out by the last crop, and other things over which we have no control, and as a consequence our crop is shortened up, and in that way, as I say, the Lord is trying to help us equalize supply and demand. The trouble was a few years ago, down in Harrison county, the Lord equalized it a little bit too heavy and we didn't raise any corn, because a hot wind came over from Kansas and burnt it all up. But it decreased production just to that extent.

Must Have Better Credits.

Now I will say a word or two about some influences that I think will help materially. You know, I have been harping about reviving this War Finance Corporation; the federation generally has been harping about it; the American Federation has been talking about it. You know what the Secretary of the Treasury said about it? But we talked to our senators and congressmen about it, and we urged it so hard that yesterday or the day before that resolution passed the senate, asking for the re-establishment and putting into operation this War Finance Corporation.

Now, that may be a lame duck—some of them say that it is. One man up here at Sioux City, a big banker, told me I didn't know what I was talking about. That is probably true, but if that thing would help us to take some of this surplus stuff we have over to those people in Europe who are starving to death, it seems to me it would be a good proposition, and I wouldn't care very much if we never got the money that was furnished to buy that, or not—whether we ever get that credit back or not. Suppose we never do, we will have sent our surplus stuff out of this country and let them eat it, and when they get their stomachs full they will be able to get to work, which they are not able to do now if they are starving; and we will let those fellows get back on their feet and we will get rid of our surplus and ourselves get more for our stuff at home, and then we will be on a better basis all around.

That is my theory, and whether it is sound or not, I hope this resolution will get thru the house and go to those fellows who are in authority down in the cabinet and put the proposition up to them, and then we will know exactly who is to blame for it if that War Finance Corporation doesn't go to work.

There is also a large corporation being organized under the Edge act, but I have no faith in that giving us any relief, because those bankers are going to get some security, are going to issue those credentials, and they are going to increase the power of that $100,000,000 to $1,000,000,000; but they aren't going to look much to the agricultural products to ship abroad, because if they ship those fellows bread and butter over there, the Austrians and Germans, and those big, husky fellows that are starving now, they will eat that stuff up and there won't be anything to bank their securities against. The things that that corporation will do, I think, unless you watch it mighty close, is to send cultivators and reapers and plows and tractors and motors and manufacturing products over there, and set those fellows to work on agricultural production. It seems to me we want to look into that matter very carefully. Mr. Cunningham, secretary of the Iowa Farm Bureau Federation, attended a meeting of the committee that discussed the formation of this corporation, and he tells me that in the resolution that the committee brought out there wasn't one word about agriculture, and Mr. Cunningham insisted that agriculture should also be inserted in there, and after calling their attention very pointedly to the matter they did write agriculture in there. Now, that never would have been done if we hadn't had a Farm Bureau Federation; they never would have thought of it, probably, so you see that while we may not be doing so many big things or getting such large results at once, we are having some influence.

But I want to get down to this point of foreign trade. Do you know that there are something like 425,000,000 head of cattle in the world? British India has something like 90,000,000 head of cattle. Out of 425,000,000 head the United States has 57,000,000. I think that has increased some—that was six years ago, the only world statistics that we have complete, but I think since the war has closed it has been determined that the increase in cattle in the United States has been about 12,000,000 during that six-year period, so that the United States should have possibly 61,000,000 head, but out of that bunch we have something like 260,000,000 head of cattle that are not in the United States. We get to thinking about Iowa and we get the idea in our heads that Iowa is producing about all the cattle that there are. We are producing a lot of them, but there are a lot of them somewhere else.

Look at the hog industry. We have in the United States something like 73,000,000 head of hogs. Outside of a few pig-pens in England and

France, the balance of the world six years ago was practically pigless. During the war, the supposition is, the pigs in those countries engaged in the war were wiped out, leaving the United States practically in control of the pork production of the world.

Along the line of sheep, it is interesting to note that the number of sheep increased remarkably during the war, because the countries that were engaged in the war never did produce very many sheep. Russia, I think, had somthing like 45,000,000, and those, probably, were wiped out during the war. Australia, New Zealand, Africa and South America produce by far the greater number of those animals. During the last few months there have been imported into the United States something like 25,000,000 frozen carcasses of lambs. Those that have been frozen in the United States amount to about 1,900,000. So when you find the sheep market in the United States down to 1½ cents a pound, you immediately think of the 25,000,000 frozen carcasses that have come in from some other part of the world.

You know those countries in South America, for instance Argentina, comprise a territory 2,000 miles long and about 600 miles wide, reaching from the Tropics to the Antartics, rich, fertile territory. Just north of it is Brazil, with a territory almost as large as the United States, also rich and undeveloped. Brazil we think about as an exporter of coffee, and practically all of our coffee comes from there, but Brazil today is supporting 20,000,000 head of cattle, and it is exporting hides and tallow and fresh meats. Argentina is doing the same thing. Vegetable oils are coming into the United States by the millions of pounds.

Iowa is not insolvent. They talk about the $91,000,000 that we owe the Federal Reserve Bank. We have got 26,000,000 hens in Iowa, and if they all laid an egg a day, that would be over a million dollars, because eggs are worth 5 cents apiece just now, and if we kept those hens laying for ninety days, we could pay off the Federal Reserve Bank and besides have a few eggs for breakfast while we are on the job. (Applause.)

So I say, Iowa is not insolvent, when it has something like $700,000,000 worth of produce, even at these low prices. Dairy products last year alone ran $140,000,000. Stay by the ship! I think we have given the Federal Reserve Bank to understand that we know our position, and we are not insolvent. I think they understand us much better than they did before they made the trip with the bankers' train. I think they will give us a little more time; and, finally, boys, we are going to work this thing out, and the best place to do it now—and it will be a better place after this thing is worked out—is the Iowa farm. I have faith in this proposition, and it is up to us to stick to it until we finally get results. (Applause.)

THE CORN BELT CATTLE FEEDERS' CO-OPERATIVE ASSOCIATION.

Discussion of the proposed articles of the Corn Belt Cattle Feeders' Co-operative Association was resumed. Mr. Wallace read the articles section by section, time being given to discuss each section as it was read. The result was a great deal of trivial discussion, as was to be expected in view of the unfamiliarity with the whole matter. Sections 1 to 6, inclusive, of Article 2, were passed without material change. A prolonged discussion followed the reading of Section 7. There was quite a diversity of opinion as to whether feeders would care to submit their buying to buying agencies at the river markets. It was finally decided to allow the section to stand and take up the matter again when discussing the purchaser's agreement.

Section 8 was changed by dropping out the last eleven words and substituting the words: "make directly available to members the widest possible facilities at the best possible interest rates."

Sections 9 and 10 were passed as printed.

Section 11 was changed and made to read: "for the adjustment and collection of all reasonable claims."

Sections 13, 14 and 15 were allowed to stand as printed.

A prolonged discussion followed the reading of Section 16, with the result that it was stricken out.

ELECTION OF OFFICERS.

The consideration of the articles was suspended at this point and the matter of election of officers was taken up. Mr. Sykes was unanimously elected president to succeed himself; Mr. Gunn, vice-president, and Mr. Charles Goodenow, treasurer.

Directors were elected as follows: Third district, D. W. Mott, Hampton; fifth district, A. L. Ames, Traer; seventh district, E. L. Hill, Minburn; ninth district, Joseph Coffman, Guthrie Center; eleventh district, W. P. Dawson, Aurelia.

Afternoon Session.

George E. Morse, chairman of the joint committee to meet with the Iowa State Co-operative Shippers' Association, made a report to the effect that the joint committee recommends that the next annual meeting of the Corn Belt Meat Producers' Association be held jointly with the Iowa State Federation of Co-operative Shippers. The report was unanimously adopted.

The discussion of the proposed co-operative association was then resumed. Article 3, with regard to membership, was adopted; also Article 4, 5, 6, 7 and 8, except that the proposal that two directors shall be appointed by the American Farm Bureau Federation was stricken out. Article 10 was adopted.

In considering Article 11, it was decided that fees should be based on the number of cattle fed, and the section was changed to read that the membership should be on the basis of $3.50 per car for the cattle fed.

A prolonged discussion resulted after the reading of Paragraph C, under Section 1, Article 12, at the conclusion of which the section was changed to read that "the association shall, under the discretion of the board of directors, maintain an agent at one or more of the feeder markets, who can assist the members of this organization to purchase their cattle and furnish them such information as might be of benefit to those who are purchasing cattle."

During the course of the discussion, Mr. Stafford, of the Chicago Live Stock Exchange, and Mr. Kay Wood, also of the Chicago exchange, participated at times. Speaking to the general idea, Mr. Wood said:

"I want to say that the Chicago Live Stock Exchange and the National Live Stock Exchange, which is an association with some of the same officers, have been working very intently upon the proposition to explain and get at the secret of these very violent fluctuations that have been taking place in the market from day to day, and from week to week, and we haven't been able to understand why one week the price of cattle should be at a certain figure and within a day or two it would fall two dollars a hundred; and we haven't been able to understand why after that fall took place it should go up two dollars a hundred.

"Now, we have been trying to get at that, and have gone into conferences with the packers, and asked them to explain to us why it was that we had to undergo such violent fluctuations, and they have thrown up their hands and said, 'We will throw open our books and show you our figures and show you the heads and show you everything we have. We can not regulate this thing; it is up to the producers.' And, gentlemen, I believe it is up to the producers, or certainly in large part.

"I have listened to this discussion with a tremendous amount of interest, and I believe that you have hit upon the right principle as to starting out in an organized, methodical manner, to determine how many cattle are ready for the market, on the one hand, and what the condition of the market is, on the other hand; and I don't believe that you will have removed these violent fluctuations, certainly not in these troubled times, unless you begin to get an intelligent idea of what you are doing at home, and have somebody that is interested in you, and intelligent enough to tell your entire community what is the situation. We commission men have been trying to do that in a disorganized way, just as you are going to do it in an organized way. A good many of you don't believe in us, but we honestly have been doing our level best.

"You have now come to the proposition, as I say, where some radical departure from old methods of marketing has to be undertaken, and I am here to say, as I said in the presence of the exchange also, that we are with you on this proposition and we endorse this idea of getting you to stand up for the benefit of all and to eliminate some of what you might call your selfish interests. I don't know that this thing is practical, Mr. Wallace and Mr. Sykes, but I do think that it is a step in advance, and if you leave these men who have worked upon this thing, which is the result of years of their endeavor to do something good for the benefit of all, if you leave them tonight just where they started out this morning, they have not gotten along any further than they were six months ago. But if you have nerve enough to stand by these fellows who have worked for your interests, and endorse this proposition, you will get somewhere." (Applause).

After some further quite general discussion, motion was made to the effect that the members of the Corn Belt Meat Producers' Association endorsed the general principles of the plan submitted, eliminating for the time the proposal to establish selling and buying agencies; and that the proposed constitution be referred back to the original committee, with instructions to redraft it in accordance with the results of the discussion heard here, and submit it at a later meeting to be called by the president. This motion was adopted.

It is expected that the Live Stock Committee of Fifteen appointed by the Farm Bureau Federation, will consider this whole matter.

Meeting adjourned.

RESOLUTIONS ADOPTED BY THE CORN BELT MEAT PRODUCERS' ASSOCIATION.

The delegates to the seventeenth annual convention of the Corn Belt Meat Producers' Association find reason to again congratulate the members upon the satisfactory work of the Association and the manner in which it has been maintained during a period of great farm organization activity. The service the Corn Belt Meat Producers' Association has rendered to the stockmen and farmers of the state during the past seventeen years justifies the confidence the members repose in it.

We want to express our appreciation of the work of our officers who for years have been faithful to the interests of the association. Mr. Sykes has given the best years of his life to our service and very often at a loss to his own private interests.

Henry C. Wallace has brought to the office of secretary a mind trained in the service of agriculture and we feel that much of the success of the organization has been due to his wise leadership and his earnest sympathies with the farmer and stockman in the problems of our occupation and in our efforts to improve conditions surrounding our business.

We note with pleasure the favorable mention by the public press of the name of Henry C. Wallace for the position of Secretary of Agriculture, and, recognizing his worth to the agricultural interests, we believe it to be his duty to the agricultural and live stock interests, altho he is not a candidate for that position, to accept the appointment in case same is offered him.

The events of the past year show very clealy that the only hope of putting our agriculture upon a thoroly sound basis lie in the building up of aggressive organizations which will devote themselves to looking after the farmers' business interests, and which will employ thoroly trained men capable of representing such interests.

Both the grain farmers and the meat producers are suffering heavy losses thru the unprecedented decline in prices of grain and live stock. To meet the country's needs, production of both grains and live stock was greatly stimulated. A considerable part of the recent decline in prices has been due to a decrease in our exports; and this in turn has been due to the inability of the people of foreign countries to pay for what they need. Our representatives in congress are urged to lend their aid to any workable plan which will help the foreign countries to get on their feet once more and buy from us the farm products they need.

We note with satisfaction the growth of the various Farm Bureau Federations and their organization into a strong American Federation. We again urge this national body to establish without delay a strong bureau of research and statistics under the direction of well-trained men. This bureau should study the conditions which influence production and prices, not only in the United States, but thruout the world; compile complete market statistics and interpret same with reference to conditions as they exist from time to time; study home and foreign conditions of supply and demand, and, in general, gather information concerning everything that influences production, consumption and prices. Had such a bureau of statistics and research been in working order during the past two years, it could have rendered invaluable service to the farmers and stockmen of the country. The farmer and stockman should no longer depend upon unchecked statistics, nor should they any longer depend upon the interpretation of such statistics by those whose interests are not directly connected with agriculture.

The importation of farm products from foreign countries where land is far cheaper than in the United States, and where the standard of living on the farm is very much below that maintained in the United States, has had much to do with cheapening farm products. We demand of congress the enactment of legislation which will give to the American farmer adequate protection against such competition. The interests of the entire nation demand such protection. If it is not given, our land will be robbed of its fertility at a steadily increasing rate, to the great damage of the nation.

The very great advance in freight rates imposes a heavy additional tax upon grain and live stock and their products. We urge upon the American Farm Bureau Federation, which has established a strong transportation department, that it at once begin a thoro study of rates on grain and live stock in comparison with the rates on other commodities, and if it finds such action justified, we urge it to institute proceedings before the Interstate Commerce Commission with a view to securing reduction in such rates.

We commend the work of the Bureau of Markets and the Bureau of Crop Estimates for the improvement in the statistical information that they have made during the past year, and we urge our representatives in congress to support increased appropriations for these departments.

We demand of congress the enactment of such legislation as may be necessary to assure to the farmers of the nation the full, free and unrestricted right to bargain collectively for the marketing and sale of their crops.

We demand of congress and of the general assembly of Iowa rigid economy in the administration of government and the greatest possible reduction in public expenditures.

We believe that the sooner the packing industry is placed under effective government supervision, the better it will be for both the packers and the farmers and stockmen. We strongly favor the prompt enactment by congress of the Kenyon bill, or some similar measure, which will give adequate supervision without injury to the packing industry.

We demand of the general assembly of Iowa liberal appropriations for the Iowa Agricultural College, and especially for its department of Farm Economics.

We commend the Iowa State Farm Bureau Federation for the work of its legislative bureau, and hold ourselves in readiness to co-operate with it in every way possible.

Resolved, That we endorse the Federal Farm Loan act and ask that our senators and congressmen use every means at their command to get a decision as to its constitutionality, from the supreme court of the United States, as early as possible, and in case this act is approved, that congress so amend the law that the maximum loan limit shall be not less than $25,000.

Whereas, The recent decision of the Interstate Commerce Commission in the Illinois rate case interprets the Esch-Cummins act as giving them complete authority over the railways, the entire field of transportation, the traffic itself, and all the instrumentalities and means of carrying it on; and,

Whereas, It means that the laws of the states and their officers are set aside, and that the Interstate Commerce Commission has assumed exclusive authority over the railways; and,

Whereas, Wheat, corn, live stock and all farm products are being marketed at a heavy loss to the farmer; and,

Whereas, the freight passenger rates are already burdensome to the producers and consumers, with the likelihood that the railroads will ask for further increase in rates, with no consideration apparently having been given in the recent raise in rates as to the low cost of construction and operation in the prairie states, with no completed valuation of the railways or as to the fact that the railways in these states have not millions of dollars invested in depots or terminals, we consider it unwise to confer upon the Interstate Commerce Commission the above power, Therefore, be it

Resolved, That we call upon congress to so amend the transportation act, and in such plain language, that the authority of the states over railways in their respective territories will be maintained without an opportunity for misinterpretation.

We wish respectfully to direct the attention of the officers of the American Federation to the age, strength, accomplishments and character of our association, and suggest the desirability of its being well represented on this committee.

Resolved, That the farmers of Iowa condemn every effort to confine the administration of serum and virus to veterinarians, and we demand of the Commission of Animal Health immediate action which will result in enabling farmers who have taken proper instruction to secure certificates authorizing them to administer serum.

Resolved, That the manufacture and handling of serum at the State Agricultural College should be continued, and the legislature of Iowa should provide funds to carry on the work.

Resolved, That the laws in Iowa governing the manufacture and sale of hog cholera serum do not afford protection to the farmers who purchase such serum. These laws should be very carefully revised in order to give adequate protection to purchasers and permit farmers to administer serum for themselves.

Resolved, That we are deeply interested in the work outlined for the Committee of Fifteen of the American Farm Bureau Federation, and much concerned about its organization.

PART VIII

Annual Report of the Iowa Weather and Crop Service Bureau of 1920.

CHARLES D. REED, Director

For convenient reference and comparison with past and future years, this report contains the summaries of the weekly, monthly and annual bulletins of the Iowa Weather and Crop Service in co-operation with the U. S. Weather Bureau and the United States Bureau of Crop Estimates for the year 1920.

The regular meteorological, climatological and crop statistical work was maintained efficiently, though the general condition of unrest and post bellum adjustment among the people caused more than usual difficulty in maintaining the list of co-operative observers and crop reporters.

Publications were distributed as follows: Monthly Climatological Data, about 17,000 copies; Weekly Weather-Crop Bulletins, about 15,000; Daily Weather Forecast Cards, to 1,607 addresses; and five hundred copies of the monthly reports are distributed each month through the United States Department of Agriculture Weather Bureau to scientific institutions and libraries in this and foreign countries. In co-operation with the U. S. Bureau of Crop Estimates about 30,000 copies of special monthly crop bulletins were issued.

Daily weather forecasts were distributed by telegraph at the expense of the U. S. Weather Bureau to 73 towns. From these towns the forecasts are made available by free telephone to 39,042 rural subscribers, and 132,541 town subscribers. Much attention was given to accuracy and promptness in the transmission of forecasts by telegraph and telephone.

Frost warnings are sent when necessary during the fruit blooming season to all orchardists in the State prepared to use orchard heaters and who make application in advance for the service.

Increased transportation by automobile and motor truck has created a great demand for information as to the condition of roads. From April 1st to September 30th, daily rainfall reports are telegraphed at the expense of the U. S. Weather Bureau from 26 Iowa towns to the central station at Des Moines. Many local and long-distance calls are answered as to desirable detours to avoid wet areas. A special Highway Weather Service was maintained part of the year by the U. S. Weather Bureau Offices in Charles City, Davenport, Dubuque, Des Moines and Sioux City. This proved very popular, but can not be conducted satisfactorily without more funds.

CLIMATOLOGY OF THE YEAR, 1920.

The mean temperature, 48.2°, is 0.8° above normal. February, March, June, September, October, November and December were above normal; the other months below. The highest temperature recorded was 102°, at Clarinda, on July 23. The lowest was —26°, at Elkader, on January 4, and at Inwood on December 24. The annual variation in temperature within the State was 128°. The total precipitation averaged 31.75 inches, or 0.22 inch below normal.

Spring work was very backward, particularly in the southern districts. Fruit blooms were beneficially retarded.

The mid-summer was cool and pleasant for human beings and animals and favorable for cool weather crops such as potatoes, but unfavorable for maturing corn. However, abnormally warm, dry weather September 10th-28th and through most of October matured the largest corn crop of record in Iowa, both in yield per acre, which was 46.0 bushels, and in total production which amounted to 473,800,000 bushels. It is unusual that a record breaking corn crop and a large potato crop are raised in the same year. In fact, all crops raised in the State were bountiful except spring wheat, which was nearly a failure.

Barometer (reduced to sea level). The average pressure of the atmosphere for the year was 30.03 inches. The highest pressure was 30.87 inches. at Sioux City, on January 24. The lowest pressure was 29.00 inches, at Dubuque, on December 13. The range for the State was 1.87 inches.

Temperature. The mean temperature for the State was 48.2° or 0.8° above normal. The highest annual mean was 52.3°, at Keokuk, Lee County. The lowest annual mean was 44.8° in Clayton County near Postville. The highest temperature reported was 102°, at Clarinda on July 23. The lowest temperature reported was -26° at Elkader, Clayton County, on January 4, and at Inwood, Lyon County on December 13. The range for the State was 128°.

Precipitation. The average amount of rainfall and melted snow for the year was 31.75 inches, or 0.22 inch less than the normal, and 5.01 inches less than the average for 1919. The greatest amount at any station was 44.00 inches, at Humboldt, Humboldt County, and the least amount was 20.95 inches, at Cedar Rapids, Linn County. The greatest monthly precipitation was 8.52 inches at Britt, Hancock County, in August. The least amount was a trace, at Denison, Crawford County, in January. The greatest amount in any 24 consecutive hours was 4.17 inches at Humboldt, on August 20. Measurable precipitation occurred on an average of 88 days, 7 days less than in 1919 and 3 days more than normal.

Snowfall. The average amount of snowfall was 21.7 inches. The greatest amount reported from any station was 49.3 inches at Northwood, Worth County, and the least amount was 6.5 inches at Murray, Clarke County. The greatest monthly snowfall was 19.3 inches at Northwood, Worth County, in December.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported was 72 miles an hour from the southwest at Sioux City, Woodbury County, on June 8.

Sunshine and Cloudiness. The average number of clear days was 167; partly cloudy, 93; cloudy, 106; as against 169 clear; 94 partly cloudy, and 94 cloudy days in 1919. The average percentage of the possible amount of sunshine was 56 or about 5 per cent less than the normal.

MONTHLY SUMMARIES.

JANUARY.

For the State as a whole, the January temperature was below normal, though the deficiency was neither uniform nor general. Over a considerable area adjoining the Missouri River the temperature was above normal, and in the extreme southwest and extreme west-central portions the excess amounted to nearly 4 degrees. Eastward from this area the temperature gradually became colder and over the northeastern portion, along the Mississippi River, there was a deficiency of nearly 5 degrees. There were no protracted cold periods or very severe weather, neither was there any mild weather, except for short intervals. The usual January thaw was absent and as a result the snow cover remained during the entire month over about 75 per cent of the State, but at the close of the month bare ground was general over the southern tier of counties and along the Missouri River.

Stock were able to graze in corn fields during the greater portion of the month and favorable weather conditions permitted the usual farm work, but marketing of grain was hindered by a shortage of railroad cars.

Precipitation was deficient over the entire State, except a small area over the extreme north-central portion, and the average for the State, 0.42 inch, was with three exceptions the least for January in the past 31 years. Practically the entire amount fell in the form of snow or sleet but there was less drifting than usual and railroad traffic was hindered but little.

The snow cover was favorable for winter grain and it is thought that wheat and rye were uninjured at the end of the month except over a small area in the extreme southeastern portion. An unusually large crop of ice of fine quality was harvested.

Pressure. The mean pressure (reduced to sea level) for the State was 30.29 inches. The highest recorded was 30.87 inches, at Sioux City on the 24th, and the lowest was 29.61 inches at Des Moines on the 16th. The monthly range was 1.26 inches.

Temperature. The mean temperature for the State, as shown by the records of 99 stations, was 16.7°, or 1.2° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 13.1°, or 1.5° lower than the normal; Central, 16.2°, or 2.0° lower than the normal; Southern 20.8°, or 0.1° lower than the normal. The highest monthly mean was 23.9°, at Glenwood and Thurman, and the lowest monthly mean was 10.0° at Charles City. The highest temperature reported was 58° at Thurman on the 29th, and the lowest was -26° at Elkader on the 4th. The temperature range for the State was 84°.

Humidity. The average relative humidity for the State at 7 a. m. was 86 per cent and at 7 p. m., 77 per cent. The mean for the month was 82 per cent, which is just normal. The highest mean was 88 per cent at Charles City, and the lowest, 72 per cent, at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 106 stations, was 0.42 inch, or 0.63 inch less than normal. By divisions the averages were as follows: Northern, 0.46 inch, or 0.38 inch less than the normal; Central, 0.41 inch, or 0.70 inch less than the normal; Southern, 0.40 inch, or 0.79 inch less than the normal. The greatest amount, 1.05 inches, occurred at Northwood, and the least, a trace at Denison. The greatest amount in any 24 consecutive hours, 0.64 inch, occurred at Oskaloosa on the 24th.

Snow. The average snowfall for the State was 4.6 inches, or 2.3 inches below the normal. The greatest amount, 12.7 inches occurred at Forest City, and the least, a trace at Denison.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau Station was at the rate of 56 miles per hour from the northwest, at Sioux City, on the 20th.

Sunshine and Cloudiness. The average percentage of the possible amount of sunshine was 47, or 3 per cent lower than the normal. The percentage of the possible amount at the several regular Weather Bureau Stations was as follows: Charles City, 40; Davenport, 54; Des Moines, 46; Dubuque, 55; Keokuk, 51; Sioux City, 35; Omaha, Neb., 49. Clear days average 12, partly cloudy 8, and cloudy 11.

Miscellaneous Phenomena. Fog, dense: 6th, 9th, 15th, 16th, 20th, 22d, 25th, and 31st. Glaze: 15th. Halos, lunar: 1st, 2d, 7th, 11th, 22d, 26th, 28th. Halos, solar: 8th, 22d, 26th, 28th. Sleet: 6th, 15th, 16th, 22d, 23d.

COMPARATIVE DATA FOR THE STATE—JANUARY

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	19.7	+1.8	61	—27	2.03	+0.98	3.46	0.35	------	------	---	----	----
1891	26.0	+8.1	58	— 4	1.75	+0.70	3.99	0.61	------	4	13	7	11
1892	15.3	—2.6	76	—38	1.09	+0.04	3.13	0.10	6.9	5	16	9	6
1893	9.3	—8.6	54	—34	0.74	—0.31	3.20	0.13	6.9	6	11	9	11
1894	19.3	+1.4	69	—37	1.09	+0.04	2.24	0.31	6.0	5	14	9	8
1895	13.6	—4.3	68	—31	0.85	—0.20	2.65	0.09	8.7	4	15	7	9
1896	23.4	+5.5	68	—20	0.48	—0.57	2.10	T.	2.8	3	10	10	11
1897	17.2	—0.7	66	—30	2.01	+0.96	6.16	0.15	8.2	7	12	7	12
1898	23.4	+5.5	52	—11	1.60	+0.55	5.32	T.	12.6	5	15	6	10
1899	19.8	+1.9	68	—34	0.28	—0.77	1.15	T.	1.5	3	15	10	6
1900	25.6	+7.7	66	—20	0.53	—0.52	2.47	T.	2.3	3	16	7	8
1901	23.7	+5.8	60	—21	0.74	—0.31	2.34	0.04	6.2	4	14	9	8
1902	22.4	+4.5	63	—31	0.88	—0.17	2.83	0.19	9.4	4	17	8	6
1903	23.0	+5.1	60	—12	0.28	—0.77	1.46	T.	2.0	4	13	7	11
1904	14.0	—3.9	57	—32	1.18	+0.13	3.68	0.02	6.1	6	12	8	11
1905	11.2	—6.7	56	—30	0.91	—0.14	1.82	0.12	11.1	7	14	7	10
1906	24.6	+6.7	69	—19	1.52	+0.47	4.71	0.28	11.3	5	14	6	11
1907	18.8	+0.9	68	—22	1.52	+0.47	5.30	0.10	6.0	7	8	7	16
1908	24.9	+7.0	60	—18	0.44	—0.61	1.50	0.06	4.6	2	17	8	6
1909	21.2	+3.3	72	—25	1.66	+0.61	3.74	0.41	7.8	6	9	6	16
1910	18.1	+0.2	56	—35	1.57	+0.52	3.15	0.55	12.6	6	13	7	11
1911	20.2	+2.3	66	—35	0.97	—0.08	3.73	0.11	7.3	5	9	8	14
1912	4.2	—13.7	49	—47	0.53	—0.52	1.90	T.	5.5	5	14	7	10
1913	20.9	+3.0	62	—25	0.77	—0.28	2.05	0.04	7.2	5	14	9	8
1914	27.8	+9.9	64	—10	0.88	—0.17	2.34	0.27	5.1	5	11	8	12
1915	17.5	—0.4	59	—32	1.63	+0.58	3.15	0.10	7.3	8	13	8	10
1916	17.8	—0.1	63	—34	2.62	+1.57	6.07	0.85	7.2	10	12	6	13
1917	17.0	—0.9	60	—28	0.83	—0.22	2.07	0.17	7.2	4	17	8	6
1918	8.6	—9.3	53	—35	1.02	—0.03	2.79	0.26	11.2	7	13	8	10
1919	26.8	+8.9	64	—32	0.24	—0.81	0.86	T.	2.8	2	20	5	6
1920	16.7	—1.2	58	—26	0.42	—0.63	1.05	T.	4.6	4	12	8	11

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

FEBRUARY.

While the temperature averaged slightly above the normal during February there were no protracted warm spells and for the most part the month was uniformly cold. Zero weather was experienced throughout the State but over the southeastern portion zero, or below, was reached on but a single day. Another feature was the low maxima over the State. While the maximum for the State was 59° in the extreme southeastern portion, outside of a few southern counties, the maxima were well under 50°. The excess in temperature was pronounced in some of the southwestern counties and it gradually became less to the northeast until a deficiency was shown at a single station, Dubuque. An abnormal rise in temperature occurred on the 16th, from considerably below zero over most of the State in the morning, to well above 40° in the afternoon, making a range for the day more than 50° at a number of stations.

Precipitation was deficient, the average amount for the State being less than half the normal and the average for each division was practically the same. Only a few stations in each division reported a sligh excess. Most of the precipitation was in the form of snow or sleet. Glaze covered a large portion of the southern and central divisions on the 3d and 20th making travel on foot difficult and dangerous.

The month was free from severe storms, the snow that fell drifted less than usual, and at no time during the month was traffic impeded by snow blockades. The snow cover remained on the ground over most of the northern half of the State throughout the month, but over the southern half it began to disappear early in the month and corn husking and grazing were possible generally as the month advanced. During the most severe weather considerable areas were without snow cover in the southern division and wheat is thought to have suffered materially. The roads were better than usual for this season of the year.

Pressure. The mean pressure (reduced to sea level) for the State was 30.15 inches. The highest recorded was 30.74 inches, at Dubuque, on the 3d, and the lowest was 29.48, at Charles City and Dubuque, on the 17th. The monthly range was 1.26 inches.

Temperature. The mean temperature for the State, as shown by the records of 103 stations, was 24.0°, or 3.5° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 20.8°, or 3.7° higher than the normal; Central, 23.7°, or 3.0° higher than the normal; Southern, 27.4°, or 3.8° higher than the normal. The highest monthly mean was 30.2°, at Clarinda, and the lowest monthly mean was 18.2°, at Postville. The highest temperature reported was 59°, at Keokuk on the 22d, the lowest was —22°, at Elkader, on the 16th. The temperature range for the State was 81°.

Humidity. The average relative humidity for the State at 7 a. m. was 85 per cent, and at 7 p. m. it was 76 per cent. The mean for the month was 81 per cent, or 1 per cent higher than the normal. The highest monthly mean was 88 per cent, at Charles City, and the least was 72 per cent, at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 108 stations, was 0.56 inch, or 0.59 inch less than the normal. By divisions, the averages were as follows: Northern, 0.52 inch, or 0.39 inch less than the normal; Central, 0.57 inch, or 0.63 inch less than the normal; Southern, 0.58 inch, or 0.77 inch less than the normal. The greatest amount, 1.75 inches, occurred at Lacona, and the least, 0.04 inch, at Mason City. The greatest amount in any 24 consecutive hours, 0.75 inch, occurred at Earlham, on the 4th, and Little Sioux, on the 5th.

Snow. The average snowfall for the State was 4.1 inches, or 3.3 inches less than the normal. The greatest amount, 12.5 inches, occurred at West Bend, and the least, a trace, at Burlington, Corning, Lamoni and Mt. Pleasant.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau Station was 42 miles an hour from the northwest at Sioux City on the 13th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 39, or about 17 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 28; Davenport, 45; Des Moines, 43; Dubuque, 43; Keokuk, 48; Sioux City, 29; Omaha, Neb. 34.

Miscellaneous Phenomena. Fog: 1st, 2d, 3d, 6th, 7th, 8th, 13th, 20th, 21st, 22d. Halos, lunar: 11th, 12th, 27th. Halos, solar: 12th, 20th. Parhelia: 14th. Sleet: 3d, 4th, 5th, 8th, 9th, 17th, 20th, 21st, 22d. Zodiacal light: 16th, 18th.

COMPARATIVE DATA FOR THE STATE—FEBRUARY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	26.0	+5.5	67	—24	0.83	—0.32	2.18	0.11	------	------	----	----	----
1891	19.4	—1.1	70	—31	1.16	+0.01	2.41	0.55	------	3	13	7	8
1892	28.1	+7.6	68	—20	1.20	+0.05	2.18	0.12	5.0	6	6	7	16
1893	16.4	—4.1	60	—28	1.39	+0.24	2.91	0.06	8.1	6	10	8	10
1894	19.7	—0.8	60	—19	0.89	—0.26	2.41	T.	8.4	3	16	8	4
1895	16.4	—4.1	73	—33	0.49	—0.66	1.34	0.02	3.3	4	13	9	6
1896	27.4	+6.9	78	—13	0.71	—0.44	2.40	0.04	5.4	4	12	9	8
1897	24.7	+4.2	61	—24	0.89	—0.26	1.81	0.22	8.0	5	6	10	12
1898	24.2	+3.7	62	—18	1.20	+0.05	3.65	0.10	7.8	5	10	9	9
1899	12.2	—8.3	75	—40	0.89	—0.26	4.32	0.12	7.1	5	11	10	7
1900	14.8	—5.7	60	—27	1.30	+0.15	4.57	0.18	9.9	6	10	8	10
1901	17.5	—3.0	49	—21	1.01	—0.14	3.00	0.12	9.7	4	15	7	6
1902	17.6	—2.9	62	—21	0.73	—0.42	2.39	0.02	2.6	4	13	8	7
1903	19.8	—0.7	56	—21	1.18	+0.03	3.25	0.30	7.9	4	13	7	8
1904	14.8	—5.7	70	—26	0.41	—0.74	1.99	T.	4.5	4	10	9	10
1905	12.8	—7.7	69	—41	1.57	+0.42	2.97	0.44	15.5	7	14	6	8
1906	23.6	+3.1	66	—32	1.29	+0.14	2.91	0.20	6.1	5	14	7	7
1907	25.0	+4.5	65	—31	0.71	—0.44	1.95	0.06	4.6	4	14	6	8
1908	24.3	+3.8	59	—16	1.69	+0.54	3.95	0.23	8.9	6	12	6	11
1909	26.2	+5.7	62	—26	1.54	+0.39	4.72	0.30	7.7	5	11	6	11
1910	17.8	—2.7	58	—21	0.46	—0.69	2.09	T.	4.0	3	14	8	6
1911	27.3	+6.8	71	—13	2.76	+1.61	5.46	0.50	7.0	6	12	6	10
1912	18.1	—2.4	57	—30	1.21	+0.06	3.25	0.04	11.2	5	10	9	10
1913	20.2	—0.3	70	—24	0.82	—0.33	2.39	0.07	7.3	4	14	7	7
1914	16.8	—3.7	59	—29	0.87	—0.28	1.99	0.32	9.2	6	10	9	9
1915	29.1	+8.6	62	— 8	2.93	+1.78	5.39	0.43	9.4	9	9	5	14
1916	19.0	—1.5	62	—32	0.55	—0.60	1.38	0.05	6.0	4	14	8	7
1917	15.2	—5.3	68	—37	0.36	—0.79	1.19	T.	3.5	3	14	8	6
1918	23.0	+2.5	70	—36	0.95	—0.20	2.10	0.09	6.0	5	14	7	7
1919	24.9	+4.4	65	—16	2.42	+1.27	4.12	1.32	9.9	8	11	5	12
1920	24.0	+3.5	59	—22	0.56	—0.59	1.75	0.04	4.1	5	9	6	14

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

THE WINTER OF 1919-20.

The mean temperature for the three winter months was 18.6°, which is 2.2° below the normal for the State, and 9.5° lower than the mean for 1918-1919, which is the warmest of the 30 winters of record. The highest temperature reported was 59° at Keokuk, Lee County, on February 22d. The lowest temperature reported was 36° below zero at Thurman, Fremont County, on December 10th.

The average monthly precipitation for the State was 0.51 inch, and the average total precipitation was 1.52 inches, or 1.90 inches less than the winter normal, and the least amount recorded since State-wide records have been kept. The least amount recorded in any previous winter was 1.65 inches in the winter of 1898-1899. The precipitation was almost entirely in the form of snow and the greater portion of the State was continuously snow covered throughout the winter. The average total snowfall, unmelted, was 14.5 inches, or 6.0 inches less than the normal and 3.4 inches less than the average for the winter of 1918-1919.

The total number of days with .01 inch or more of precipitation was 13, or 5 less than the average for the winter of 1918-1919. The average number of clear days was 32, partly cloudy 21, cloudy 38, as compared with 40 clear, 18 partly cloudy, 32 cloudy days during the winter of 1918-1919.

MARCH.

March was warm, wet and windy. The month opened with the temperature above normal but this was followed by a cold spell that continued from the 4th to the 7th, inclusive, and during this period temperatures of zero, or lower, were recorded throughout the State. The rest of the month was warm but an occasional day with the temperature below normal. The ground thawed rapidly after the first week and by the end of the third week the frost was generally out of the ground.

For the state as a whole, this was the wettest March of record. Only a small area in the southwestern portion had a deficiency. The distribution both as to time and amount was uniform, and except a few points in the northwestern portion, the precipitation was mostly rain. The heaviest amounts were recorded in the south-central portion.

The snow cover remained on the ground over the northern portion until about the middle of the second week and over a large portion of the northern section the ground was continuously snow covered since the last week in November. As a result of this heavy snow blanket some stations reported that there was no frost in the ground during the entire winter. The snow that occurred later in the month remained on the ground for only short periods.

Stormy weather was the outstanding feature, due to the passage of an unusual number of energetic general storm centers through, or near the boundaries of the State. The highest wind velocity and lowest barometer reading ever recorded in the State in March occurred at Sioux City, and the total wind movement was high for the entire State. Much damage resulted from the wind which in many cases blew in violent gusts. Many barns, wind mills, silos and telephone poles were blown down and in the cities many plate glass windows were broken. The greatest damage from the wind occurred in the northeast portion where the property loss was between $75,000 and $100,000. (See page 33).

Conditions were not favorable for farm work over most of the State, being too wet, but at the close of the month some progress had been made and considerable seeding of small grain had been accomplished. Roads were muddy and in poor condition the greater portion of the month.

Pressure. The mean pressure (reduced to sea level) for the State was 29.87 inches. The highest recorded was 30.60 inches, at Sioux City and Omaha, Neb., on the 6th; and the lowest was 28.85 inches, the lowest of record for the State for March, at Sioux City, on the 15th. The monthly range was 1.75 inches.

Temperature. The mean temperature for the State, as shown by the records of 100 stations, was 38.0°, 4.7° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 34.5°, or 4.0° higher than the normal; Central, 38.6°, or 5.0° higher than the normal; Southern, 41.0°, or 5.1° higher than the normal. The highest monthly mean was 42.8°, at Clarinda, and the lowest monthly mean was 32.0°, at Northwood and Rock Rapids. The highest temperature reported was 80°, at Little Sioux and Onawa, on the 31st. The lowest temperature reported was —21°, at Inwood on the 5th. The temperature range for the State was 101°.

Humidity. The average relative humidity for the State at 7 a. m. was 79 per cent, and at 7 p. m. it was 65 per cent. The mean for the month was 72 per cent, or about 2 per cent lower than the normal. The highest monthly mean was 80 per cent, at Charles City, and the lowest was 64 per cent, at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 104 stations, was 3.02 inches, or 1.25 inches more than the normal. By divisions the averages were as follows: Northern, 2.81 inches, or 1.28 inches more than the normal; Central, 2.79 inches, or 0.92 inch more than the normal; Southern, 3.46 inches, or 1.54 inches more than the normal. The greatest amount, 5.70 inches, occurred at Albia, and the least, 0.47 inch, at Omaha, Neb. The greatest amount in any 24 consecutive hours, 2.50 inches, occurred at Keosauqua, on the 24th-25th and at Lamoni on the 25th.

Snow. The average snowfall for the State was 2.4 inches, or 2.9 inches less than the normal. The greatest amount, 16.2 inches, occurred at Rock Rapids. Four stations reported no snow, and 24 stations reported only a trace.

Wind. The prevailing direction of the wind was from the southwest. The highest velocity reported from a regular Weather Bureau Station was at the rate of 65 miles per hour from the west, the highest of record for the month of March, at Sioux City, on the 16th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 60, or about 2 per cent higher than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 53; Davenport, 60; Des Moines, 64; Dubuque, 65; Keokuk, 59; Sioux City, 59; Omaha, Neb., 61.

Miscellaneous Phenomena. Aurora: 4th, 5th, 22d, 23d. (See page 33.) Birds: (migration of) Bedford, blue birds on the 10th; Boone, robins and blue birds on the 12th, ducks flying north on the 19th; Corydon, robins on the 19th; Earlham, robins on the 1st, blue birds on the 11th, wild geese, ducks and black birds on the 13th, meadow larks on the 20th; Elkader, robins on the 15th; Jefferson, robins on the 8th; Milford, robins and meadow larks on the 18th, blue birds and red wing black birds 22d; Nora Springs, robins on the 22d; Oskaloosa, robins and blue birds on the 14th and 15th; Pocahontas, robins on the 9th; Postville, robins on the 14th; Rock Rapids, robins on the 13th; Whitten, robins on the 2d. Dust: (red) 15th, 18th. (See page 33.) Fog: 1st, 10th, 11th, 21st, 25th. Hail: 3d, 14th, 18th, 23d, 24th, 28th, 31st. Halos, lunar: 5th, 18th, 28th, 29th. Halos, solar: 4th, 5th, 6th, 7th, 8th, 10th, 13th, 14th, 17th, 19th, 21st, 25th, 28th. Thunderstorms: 11th, 14th, 17th, 18th, 23d, 24th, 25th, 27th, 28th, 29th, 31st. Sleet: 3d, 4th, 6th, 11th, 12th, 18th, 19th, 23d. Winds: (high) 2d, 4th, 12th, 14th, 15th, 16th, 17th, 18th, 22d, 23d, 25th, 27th, 28th, 29th, 31st.

Rivers. The interior rivers were frozen until toward the middle of the month a general break up occurring from the 12th to the 16th. Moderately high stages prevailed after the breakup but the flood stage was not reached except on the Des Moines below Tracy to some distance below Ottumwa, due to the formation of ice gorges. Heavy rains in the lower Des Moines watershed on March 24-25 caused flood stages from below Tracy to the mouth. At Ottumwa a crest stage of 12.3 feet, 2.3 feet above flood stage, occurred on the 26th. The Mississippi River was frozen until a break started on the 11th and by the 19th the ice had almost disappeared. During the first part the stages of this river were moderate but after the break occurred rising stages prevailed and by the end of the month the worst flood of record, so early in the season was approaching. Nearly stationary, but moderate stages prevailed on the Missouri the first of the month but during the last half there were rapid fluctuations with high stages for the season.

COMPARATIVE DATA FOR THE STATE—MARCH.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890 -----	28.0	—5.3	75	—24	1.57	—0.20	3.67	0.32	------	------	----	----	----
1891 -----	26.8	—6.5	66	—19	2.60	+0.83	4.58	1.33	------	10	6	8	17
1892 -----	31.9	—1.4	84	— 6	2.22	+0.45	4.58	0.57	3.9	6	11	8	12
1893 -----	31.8	—1.5	84	— 8	2.14	+0.37	4.40	0.64	4.0	8	9	11	11
1894 -----	41.0	+7.7	84	— 5	2.03	+0.26	4.52	0.26	2.7	6	13	10	8
1895 -----	34.4	+1.1	94	—11	0.83	—0.94	2.60	0.22	2.9	4	16	8	7
1896 -----	30.9	—2.4	81	—12	1.10	—0.67	3.99	0.16	5.4	5	12	9	10
1897 -----	32.0	—1.3	72	—22	2.39	+0.62	6.16	0.29	5.5	8	9	8	14
1898 -----	37.5	+4.2	72	— 2	1.94	+0.17	6.21	0.33	3.7	6	12	9	10
1899 -----	23.0	—10.3	75	—16	1.62	—0.15	5.90	0.37	8.0	6	7	12	12
1900 -----	30.7	—2.6	81	—13	2.06	+0.29	5.15	0.45	6.6	5	12	9	10
1901 -----	34.2	+0.9	76	— 8	2.64	+0.87	5.25	0.70	12.6	7	10	8	13
1902 -----	39.1	+5.8	79	—12	1.45	—0.32	4.33	0.13	1.3	7	9	11	11
1903 -----	38.8	+5.5	82	6	1.38	—0.39	3.90	0.15	3.9	7	11	7	13
1904 -----	34.8	+1.5	78	3	2.18	+0.41	4.57	0.50	4.4	7	8	8	15
1905 -----	41.5	+8.2	84	1	2.04	+0.27	3.70	0.89	4.1	7	8	8	15
1906 -----	27.1	—6.2	65	—14	2.34	+0.57	4.55	0.58	8.9	10	8	7	16
1907 -----	40.6	+7.3	92	— 7	1.35	—0.42	5.05	0.23	4.1	6	14	7	10
1908 -----	37.9	+4.6	85	— 8	1.58	—0.19	3.74	0.45	1.1	6	13	7	11
1909 -----	32.5	—0.8	71	—15	1.53	—0.24	5.00	0.28	9.8	6	12	10	9
1910 -----	48.9	+15.6	92	—10	0.17	—1.60	1.37	0.00	T.	1	23	6	2
1911 -----	39.4	+6.1	83	2	0.93	—0.84	4.84	T.	1.9	5	16	9	6
1912 -----	24.9	—8.4	70	—19	2.01	+0.24	5.25	0.60	19.1	7	15	6	10
1913 -----	31.9	—1.4	78	—23	2.48	+0.71	5.88	0.74	5.3	9	11	10	10
1914 -----	34.7	+1.4	78	— 5	1.69	—0.08	3.84	0.28	1.8	7	12	8	11
1915 -----	39.3	—4.0	61	— 5	0.96	—0.81	2.12	0.17	8.8	5	8	9	14
1916 -----	35.2	+1.9	80	—18	1.57	—0.20	5.80	0.23	2.9	6	11	9	11
1917 -----	34.6	+1.3	85	—12	1.84	+0.07	4.35	0.57	6.2	6	14	8	9
1918 -----	42.9	+9.6	85	0	0.63	—1.14	2.12	0.03	2.6	3	19	7	5
1919 -----	37.5	+4.2	78	—11	2.33	+0.56	5.40	0.81	1.1	6	15	8	8
1920 -----	38.0	+4.7	80	—21	3.02	+1.25	5.70	0.47	2.4	7	15	7	9

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

APRIL.

The month was cold and wet. Since 1890 there has been but one colder April and only four have had greater precipitation. The maximum temperature, 78° is the lowest record and the minimum, 1°, is within 1° of the record for April. Killing frosts or freezing temperatures occurred on a large number of days over most of the State and on the 28th freezing temperatures were general but owing to the backward season there was practically no damage from frost. At points in the southern portion of the State the lowest April temperature ever recorded occurred on the 5th.

Precipitation was much above normal over the entire State except a few small areas. An unusual feature was a heavy fall of snow on the 3d and 4th, over most of the southern third of the State. The snow drifted badly and it was the worst storm of the winter in that part of the State. Trains were much delayed. Sleet occurred on a large number of days but the storm that occurred on the 11th was the most damaging. Telephone companies were the chief sufferers and the storm appeared to be the worst westward from Adair County to the Missouri River. Between Atlantic and Adair 215 telephone poles were reported down.

On the 19th between 3 and 4 p. m. an unusual downpour of rain in the vicinity of Leighton about 10 miles northwest of Oskaloosa raised the Skunk River 4.5 feet in 24 hours washed out 300 feet of the C. R. I. & P. R. R. track northwest of Evans station, washed fields clean of recently plowed soil and eroded deep ditches where none had been before. The rain did not fall in ordinary drops but more like the discharge from a hose. Thunder and lightning were absent. Darkness at Oskaloosa was such from 3 to 3:15 p. m. that persons distant 100 feet could not be recognized and artificial lights were used in stores and on automobiles. The darkness was not like that of an ordinary storm cloud but more like the advance of evening. Soon after 3:15 p. m. the clouds lifted from the northwest and in 10 minutes daylight was normal. The rainfall at Oskaloosa was light. Hail fell at Leighton.

The month was unfavorable from an agricultural standpoint, being too cold for plant growth and too wet for plowing and seeding. The rain was especially heavy on the 18th and 19th, and amounted to considerably more than an inch over most of the State. During the rest of the month fields were very muddy and farm work was practically at a standstill. The oat acreage was greatly reduced on account of the protracted unfavorable conditions at seeding time and this was particularly the case in the southern portion of the State. No corn had been planted at the close of the month. The cold weather beneficially retarded fruit buds which at the close of the month had barely begun to swell and no foliage had appeared.

Unusual, complex optical phenomena were observed at Miller's Bay, West Okoboji Lake on April 8.

Pressure. The mean pressure, (reduced to sea level), for the State was 29.85 inches. The highest recorded was 30.28 inches, at Dubuque on the 24th, and the lowest was 29.17 inches at Davenport and Dubuque on the 1st. The monthly range was 1.11 inches.

Temperature. The mean temperature for the State, as shown by the records of 103 stations, was 42.4°, or 6.3° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 40.3°, or 6.4° lower than the normal; Central, 42.8°, or 6.1° lower than the normal; Southern, 44.1°, or 6.5° lower than the normal. The highest monthly mean was 46.8° at Centerville, and the lowest was 37.4°, at Estherville. The highest temperature reported was 78°, at Afton, Clinton, Keokuk and Olin, on the 21st, and the lowest was 2° at Bedford and Thurman on the 5th. The temperature range for the state was 76°.

Humidity. The average relative humidity for the State at 7 a. m. was 80 per cent, and at 7 p. m. it was 61 per cent. The mean for the month was 70 per cent, or 4 per cent above the normal. The highest monthly mean was 74 per cent at Sioux City, and the lowest was 66 per cent, at Dubuque.

Precipitation. The average precipitation for the State, as shown by the records of 107 stations, was 4.59 inches, or 1.73 inches more than normal. By divisions the averages were as follows: Northern, 4.26 inches, or 1.58 inches more than the normal; Central, 4.49 inches, or 1.63 inches more than the normal; Southern, 5.02 inches, or 1.97 inches more than the normal. The greatest amount, 7.23 inches, occurred at Oakland, and the least, 1.93 inches, occurred at Forest City. The greatest amount in any 24 consecutive hours, 3.34 inches, occurred at Pella, on the 19th.

Snow. The average snowfall for the State was 2.0 inches, or 0.2 inch more than the normal. The averages by divisions were: Northern, 0.9 inch; Central, 0.6 inch; Southern, 4.6 inches. The greatest amount, 12.00 inches, occurred at Bloomfield.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau Station was at the rate of 44 miles an hour from the north at Sioux City on the 1st.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 45, or about 15 per cent below normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 36; Davenport, 44; Des Moines, 47; Dubuque, 57; Keokuk, 47; Sioux City, 43; Omaha, Neb., 45. Clear days averaged 8; partly cloudy, 9; cloudy, 13.

Miscellaneous Phenomena. Aurora: 14th. Birds, migration of: Earlham, mockingbirds and wrens, 28th. Fog: 20th. Hail, 1st, 4th, 11th, 14th, 15th, 17th, 18th, 20th, 21st, 28th. Halo, lunar or solar: 4th, 6th, 8th, 9th, 15th, 24th, 29th. Sleet: 1st, 2d, 3d, 11th, 17th, 19th, 20th, 21st, 26th, 29th, 30th. Thunderstorms, 1st, 10th, 11th, 12th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22d, 26th, 29th, 30th. Tornado: 1st.

COMPARATIVE DATA FOR THE STATE—APRIL.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	51.8	+3.1	88	2	1.80	—1.06	4.46	0.38	------	6	14	9	7
1891	50.6	+1.9	93	13	2.15	—0.71	5.06	0.59	------	8	14	7	9
1892	45.4	—3.3	88	14	4.75	+1.89	8.38	2.43	5.7	9	8	9	13
1893	45.5	—3.2	96	15	4.21	+1.35	8.51	1.24	6.0	10	8	9	13
1894	51.7	+3.0	93	12	3.07	+0.21	6.91	0.55	0.2	9	11	11	8
1895	54.2	+5.5	98	8	2.62	—0.24	5.88	0.28	2.1	5	14	8	8
1896	54.5	+5.8	94	10	5.02	+2.16	9.67	2.35	4.5	11	11	10	9
1897	47.9	—0.8	89	19	5.35	+2.49	9.86	2.22	T.	11	9	9	12
1898	48.1	—0.6	91	14	2.56	—0.30	4.82	0.27	T.	8	13	9	8
1899	48.9	+0.2	89	1	2.40	—0.46	5.76	0.56	2.0	7	12	11	7
1900	52.2	+3.5	89	19	2.67	—0.19	6.62	0.43	0.9	6	12	9	9
1901	49.9	+1.2	92	15	1.79	—1.07	3.47	0.66	2.0	5	14	8	8
1902	48.2	—0.5	96	9	1.71	—1.15	4.15	0.40	T.	5	14	11	5
1903	49.8	+1.1	86	17	2.98	+0.12	6.00	0.74	0.8	9	11	9	10
1904	44.1	—4.6	86	13	3.63	+0.77	8.97	1.52	1.4	7	15	6	9
1905	47.5	—1.2	90	10	3.03	+0.17	5.49	0.63	1.2	8	12	8	10
1906	52.5	+3.8	94	22	2.42	—0.44	5.55	0.53	0.6	8	14	9	7
1907	41.5	—7.2	80	10	1.32	—1.54	3.22	0.24	2.7	6	12	8	10
1908	50.5	+1.8	91	8	2.24	—0.62	4.59	0.67	0.3	8	14	8	8
1909	43.8	—4.9	86	14	4.58	+1.72	9.43	0.83	3.1	12	9	9	12
1910	52.5	+3.8	99	15	1.48	—1.38	4.86	0.10	3.0	7	14	7	9
1911	46.7	—2.0	86	3	3.09	+0.23	6.04	1.33	3.6	9	11	8	11
1912	49.9	+1.2	84	20	2.66	—0.20	5.66	0.78	1.1	8	13	8	9
1913	50.2	+1.5	88	16	3.28	+0.42	7.43	1.12	2.7	9	15	5	10
1914	48.6	—0.1	88	11	2.52	—0.34	5.03	0.37	0.3	8	10	8	12
1915	57.2	+8.5	95	18	1.41	—1.45	4.02	0.05	T.	7	15	10	5
1916	47.1	—1.6	90	11	2.62	—0.24	5.92	1.13	1.1	10	10	9	11
1917	45.5	—3.2	88	17	4.55	+1.69	7.84	2.05	3.8	11	9	7	14
1918	44.8	—3.9	79	12	2.32	—0.54	4.20	1.01	3.5	9	12	8	10
1919	48.4	—0.3	81	20	4.78	+1.92	9.00	1.94	0.7	14	8	8	14
1920	42.4	—6.3	78	22	4.59	+1.73	7.13	1.93	2.0	12	8	9	13

T. indicates an amount too small to measure, or less than .005 inch rainfall and less than .05 inch snowfall.

Rivers—The interior rivers did not reach flood stage, except the Des Moines from Ottumwa to the Mississippi. Very little damage resulted. The Missouri was high for the season during much of the month but the flood stage was not reached except for a very brief period on the 5th and 6th from Omaha southward. On the Mississippi one of the worst floods of record occurred. The following are the flood stages at stations on the Mississippi River and the stage reached during the April flood: Lansing flood stage 18.0 feet, highest stage reached 17.2 feet; Dubuque, flood stage 18.0 feet, highest stage reached 21.0 feet; Clinton, flood stage 16.0 feet, highest stage reached 19.0 feet; Le Claire, flood stage 10.0 feet, highest stage reached 13.4 feet; Davenport, flood stage 15.0 feet, highest stage reached 17.1 feet; Muscatine, flood stage 16.0 feet, highest stage reached 17.7 feet; Keokuk, flood stage 14.0 feet, highest stage reached 16.8 feet. The damage was reduced to a minimum by timely warnings. At Keokuk the damage was negligible, being principally inconvenience to railroads. A broken levee that protected Muscatine Island caused the inundation of about 23,000 acres of truck land. A complete report of the flood at Dubuque, where it was especially severe, is published below.

FLOOD OF MARCH-APRIL, 1920, DUBUQUE, IOWA DISTRICT.

BY JAMES H. SPENCER, METEOROLOGIST.

Weather Bureau Office, Dubuque, Iowa, May 25, 1920.

This Mississippi River flood was the worst in this district since 1888, and has been exceeded in the last 50 years only by the floods of June, 1880, and May, 1888. It was the earliest spring flood of such magnitude of which there is any record in this section. For rapidity of rise, it is comparable, only with the flood of June, 1880. The total rise in each of these two floods continued over a period of more than two weeks, and was between 13 and 14 feet, but slightly greater in 1920.

In the flood of June, 1880, the period of maximum rise was 6.0 feet in three days during the first half of the 15-day period, while in the flood of 1920 the period of maximum rise was also 6.0 feet in three days, but occurred during the last half of the 15-day period. There is no previous record of such a rise as occurred in 1920 during the week immediately preceding the peak of the flood.

Most of the flood waters came from the headquarters of the Mississippi. The Wisconsin River was above flood stage during the same period, a maximum stage of 15 feet being recorded at Portage on March 31. This flood added about 1.5 feet to the peak of the Mississippi River flood between Dubuque and Pr. du Chien. Heavy and general rains on April 1 also added 0.5 or 0.6 feet to the peak between Pr. du Chien and La Crosse. With these exceptions the flood waters came wholly from the region north of La Crosse.

The following table shows the progress of the flood in the Dubuque river district:

	Lansing,	Pr. du Chien,	Dubuque,	Portage
March 22	8.0	7.2	7.1	10.0
" 23	8.3	7.4	7.4	9.8
" 24	8.9	7.9	8.2	9.5
" 25	9.4	8.5	8.7	9.8
" 26	9.7	9.3	9.8	10.2
" 27	10.2	9.8	10.5	11.1
" 28	10.7	10.2	11.0	12.6
" 29	11.3	10.8	11.4	14.0
" 30	12.5	11.9	11.8	14.8
" 31	13.9	13.2	12.4	14.9
April 1	15.1	15.4	13.5	14.7
" 2	16.2	17.2	15.8	14.5
" 3	16.9	18.7	18.0	14.2
" 4	17.2	19.6	19.5	13.7
" 5	17.2	19.6	20.5	13.0
" 6	16.9	19.1	20.9	12.4
" 7	16.5	18.7	21.0	12.1
" 8	....	18.0	20.7	11.6

Flood stage at Lansing, Pr. du Chien, and Dubuque is 18.0 feet, and at Portage 14.0 feet.

In two particulars the floods of June, 1880, and March-April, 1920, were not comparable. The cause in 1880 was exceedingly heavy rains early in

June over the headwaters of both the Mississippi and Wisconsin rivers. The cause in 1920 is probably indicated by the following paragraph from the National Snow and Ice Bulletin, Minnesota report, March 23, 1920: "Latter part of week abnormally warm and snow disappearing rapidly." Warm weather, the disappearance of snow in northern Minnesota, and the appearance of the flood at St. Paul were almost simultaneous. From Pr. du Chien to La Crosse the flood peak in 1880 was much higher than in 1920, but at Dubuque it was only 0.7 of a foot higher. The following table illustrates the difference:

	La Crosse,	Lansing,	Pr. du Chien,	Dubuque
Peak, June, 1880	16.2	....	21.5	21.7
Peak, Mar.-Apr., 1920	14.2	17.2	19.6	21.0
Difference	2.0	....	1.9	0.7

WARNINGS—On Monday, March 29, nine days before the peak of the flood reached Dubuque, flood warnings were issued for the entire district from the vicinity of Dubuque, to immediately below La Crosse. On this date stage of water was 11.5 feet at Dubuque, 10.8 feet at Pr. du Chien, and 11.3 feet at Lansing. Warnings were generally heeded, and movable property, such as cord wood in large quantities, live stock, farm machinery, etc., was removed from the islands and lowlands of the Mississippi throughout the section.

Later in the week when it became certain that a flood of great magnitude was approaching whatever could be done to prevent damage was done. Upon advice from this office some of the factories raised machinery to higher levels and a number of firms within the wholesale district of Dubuque removed their stocks from cellars and basements.

This office was able to render valuable service over more than a 10-day period. Information was given daily over the telephone to several hundred people. On Sunday, April 4, the office was open from 6 a. m. until 10 p. m. and the telephone was in use every moment of the time. We were able to advise many families not to move and many business houses not to move stocks or machinery after ascertaining how many inches more of a rise they could stand. On this date a northeasterly gale added to the difficulties of the railroads on the west bank of the Mississippi. After that date winds were generally more favorable.

THE FLOOD AROUND DUBUQUE—The Seippel Lumber Company's plant at the extreme south end of the city, was badly flooded and lumber was saved only with difficulty. The Standard Oil plant in the same section also suffered some damage. The Jackson Vinegar Company, Schroeder-Kleine Company, Western Grocery Company, Ernsdorf Iron Company, International Harvester Company, Becker-Hazelton Company, and other firms in the lower end of town experienced flooded basements, necessitating the removal of stocks of merchandise.

For over a week the railroads fought the flood, and scores of carloads of material were used in building temporary dikes to keep the water from undermining the tracks. The same was true of the ice companies along the river bank, whose ice houses were threatened. While serious delays resulted, railroad traffic was not completely suspended, as trains ran through the water or detoured.

Water covered the tracks in front of the Illinois Central R. R. depot, and below the depot employees performed their duties in water half way to their knees or higher. The Mulgrew Ice and Coal plant east of the Illinois Central R. R. depot was deep in water and could not be used for about 10 days. Water covered half of Jones street as far west as the railroad tracks, and the buildings at the foot of Jones street were completely surrounded. The pressure from below forced up the concrete cellar floor of the Iowa Oil Company's building. The road on the south side of the harbor was a foot under water, and on the north side of the harbor all buildings of the Dubuque Boat & Boiler works were flooded above the first floor, necessitating the raising of machinery. The road immediately south and east of the C., M. & St. P. R. R. depot was flooded.

East of Washington street for practically the entire length sewers backed up and flooded the basements of scores of homes. The packing house region near the foot of 17th street was flooded, and partial suspension of business resulted. Water covered streets around the Metz Manufacturing Company's plant, but did not run over the curb. At Eagle Point the Pumping Station, the yards of the Dubuque Lumber Company, and the Bathing Beach Buildings were badly flooded. The water was several inches above the floor of Bathing Beach buildings. The road beyond the Eagle Point High Bridge was closed during the period of the flood, and a large amount of work had to be done to save it.

STATISTICS OF MONEY LOSS BY FLOOD OF MISSISSIPPI RIVER,

DUBUQUE RIVER DISTRICT, APRIL, 1920.

Tangible property that can only be restored by the outlay of cash, either to clean it up and to put in serviceable condition, or to restore the property where the loss was total. This item includes loss to buildings, factories, highways, bridges, etc. Total about	$ 70,000.00
Loss to railroads, chiefly expenditures in saving track or other property, about	18,000.00
Loss of crops that were housed, about	1,000.00
Loss of prospective crops, chiefly strawberries, about	500.00
Loss of live stock and other movable property, about	5,000.00
Loss due to suspension of business, including wages of employees, about	5,500.00
Total loss, approximately	$100,000.00
Money value of property saved by warnings, as reported to this office	$125,000.00

MAY.

For the State as a whole the temperature averaged slightly below the normal, the deficiency being uniform over each division, though several stations in each division showed an excess. Except a warm period from the 7th to the 11th, the first 20 days were below the normal. Frost was general throughout the State on the 14th, with the temperature freezing or below over a large area but owing to the backward season very little damage resulted. After the 20th a warm period set in and all vegetation made rapid growth.

The precipitation was below normal over each division, the deficiency being slightly more than an inch in the northern division and nearly one and one-half inches in the central division. Most of the rainfall occurred as heavy downpours in three principal periods, 10th,-12th, 16th,-19th, and 22d and 23d. This condition greatly interfered with field work and at the close of the month much corn was still to be planted in the southern division. The rainfall of the 22d-23d was particularly heavy and damaging in the northern portion of Benton, Linn and Jones Counties and in the southern portions of Blackhawk, Buchanan and Delaware Counties. All railroads in the affected area suffered from washouts, the Rock Island being the chief sufferer. A serious freight wreck occurred near Vinton, resulting from a train attempting to go through a submerged area. The engine and a number of cars crossed safely but 10 cars in the middle of the train were wrecked when the track gave way. Traffic was held up on this line until the 26th. Much damage also resulted from corn fields being washed out, basements flooded as well as considerable loss to stock. The loss to transportation is estimated to exceed $100,000, and the loss to agricultural interests was much more. Many bridges and culverts were washed out. In Grant township, Linn county, every township bridge was washed out and to repair the damage will cost more than $100,000.

On the afternoon of the 8th a small tornado occurred in Washington township, Chickasaw county. Several barns and small buildings were wrecked. On the afternoon of the 22d severe local storms having marked tornadic characteristics occurred at places in Allamakee, Crawford, Harrison, Howard, Polk and Story counties and caused considerable loss to farm property. An unmistakable tornado moved from southwest to northeast across the northwest corner of New Oregon township, Howard county, some distance southwest of the town of Cresco. Three or four barns and small buildings and several trees were destroyed. No persons were killed or injured. A small tornado moved from northwest to southeast near Dunlap, Crawford county. Its path of destruction was 8 or 10 rods wide and between 5 and 6 miles long. Large trees were uprooted and corn cribs and outbuildings blown down. There was no loss of life but Karl Benedict was blown down and slightly injured.

Pressure. The mean pressure (reduced to sea level) for the State was 30.04 inches. The highest recorded was 30.50 inches, at Dubuque, on the 14th, and the lowest was 29.56 inches, at Sioux City, on the 18th. The monthly range was 0.94 inch.

Temperature. The mean temperature for the State, as shown by the records of 104 stations, was 59.4°, or 1.1° lower than the normal. By divisions, three tiers of counties to the divisions, the means were as follows: Northern, 58.3°, or 0.7° lower than the normal; Central, 59.6°, or 1.1° lower than the normal; Southern, 60.3°, or 1.4° lower than the normal.

The highest monthly mean was 61.8°, at Keokuk, and the lowest was 57.0° at Northwood. The highest temperature recorded was 89° at Afton, Cedar Rapids and Humboldt, on the 22d, and the lowest was 29°, at Clinton and Maquoketa, on the 14th. The temperature range for the state was 60°.

Humidity. The average relative humidity for the State at 7 a. m. was 75 per cent, and at 7 p. m., 55 per cent. The mean for the month was 65 per cent, or about 3 per cent below the normal. The highest monthly mean was 76 per cent at Omaha, Neb., and the lowest was 58 per cent, at Dubuque.

Precipitation. The average precipitation for the State, as shown by the records of 110 stations, was 3.26 inches, or 1.31 inches less than normal. By divisions the averages were as follows: Northern, 3.45 inches, or 1.03 inches less than the normal; Central, 3.11 inches, or 1.48 inches less than the normal; Southern, 3.23 inches, or 1.41 inches less than the normal. The greatest amount, 5.73 inches, occurred at Keosauqua, and the least, 0.63 inch, at Fort Dodge. The greatest amount in 24 consecutive hours, 4.12 inches, occurred at Keosauqua on the 11th and 12th.

Wind. The prevailing direction of the wind was from the southeast. The average hourly velocity was 7.8 miles, or 0.9 mile less than the normal. The highest velocity reported from a regular Weather Bureau Station was at the rate of 46 miles an hour from the northeast, at Davenport, on the 12th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 60, or about 2 per cent less than normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 64; Davenport, 62; Des Moines, 63; Dubuque, 71; Keokuk, 60; Sioux City, 52; Omaha, Neb., 51.

Miscellaneous Phenomena. Aurora: 12th. Fog: 17th, 25th, 31st. Frost: 1st, 2d, 5th, 14th, 15th. Hail: 2d, 11th, 14th, 21st, 22d, 26th. Halos, lunar or solar: 3d, 5th, 6th, 13th, 14th, 15th, 19th, 23d, 25th, 26th, 27th, 31st. Thunderstorms:, 1st 2d, 3d, 4th, 7th, 9th, 10th, 11th, 12th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, 26th, 27th, 31st. Rainbow: 22d, 31st.

Rivers. Moderate stages prevailed on the Mississippi with but slight fluctuations and a general falling tendency; on the Missouri moderate stages prevailed until after the heavy rains of the 11th-12th when a sharp rise occurred with a crest stage of slightly below the flood stage at Sioux City on the 16th and stages above the flood stage at Omaha on the 17th, 18th and 19th. The flood stage was also reached on the Des Moines River from the heavy rains on the 11th-12th from Tracy down. A crest of 14.4 feet was reached at Tracy on the 14th and 11.4 feet at Ottumwa on the 15th. The heavy rain of the 22d-23d caused destructive floods in the small streams especially in Benton and Linn Counties and the Maquoketa River was out of its banks on the 22d.

COMPARATIVE DATA FOR THE STATE—MAY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With precipitation .01 in.	Clear	Partly cloudy	Cloudy
1890	57.7	—2.8	90	26	3.56	—1.01	6.44	1.61	------	9	10	13	8
1891	58.3	—2.2	94	21	3.18	—1.39	7.10	1.46	------	8	14	9	8
1892	54.0	—6.5	88	29	8.77	+4.20	12.64	4.87	T.	16	5	9	17
1893	56.6	—3.9	96	26	3.45	—1.12	5.82	1.65	0	9	13	9	9
1894	61.1	+0.6	96	22	1.87	—2.70	4.77	0.33	0	6	17	10	4
1895	61.7	+1.2	104	24	3.19	—1.38	5.79	0.84	0	9	11	12	8
1896	65.5	+5.0	100	34	6.69	+2.12	11.79	3.40	0	12	11	12	8
1897	58.5	—2.0	96	20	1.92	—2.65	3.59	0.21	0	5	16	10	5
1898	59.6	—0.9	92	26	4.67	+0.10	7.82	2.22	0	12	9	10	12
1899	60.2	—0.3	90	27	6.23	+1.66	11.47	3.09	0	13	9	12	10
1900	63.2	+2.7	98	22	3.31	—1.26	6.98	0.96	0	8	14	10	7
1901	60.7	+0.2	95	28	2.35	—2.22	4.57	0.72	0	7	16	9	6
1902	63.8	+3.3	97	25	5.39	+0.82	18.04	0.87	0	13	10	12	9
1903	61.6	+1.1	91	24	8.55	+3.98	15.45	2.88	0	16	9	12	10
1904	59.6	—0.9	93	27	3.78	—0.79	8.15	1.50	0	8	13	10	8
1905	58.3	—2.2	88	28	5.95	+1.38	10.83	2.57	0	14	12	11	8
1906	60.8	+0.3	95	24	3.54	—1.03	10.72	0.89	0	11	13	10	8
1907	53.5	—7.0	96	14	3.48	—1.09	7.68	0.71	1.0	10	11	10	10
1908	59.4	—1.1	93	13	8.34	+3.77	14.33	1.33	0	15	9	11	11
1909	57.9	—2.6	97	18	4.34	—0.23	7.85	1.86	0.1	9	12	12	7
1910	55.4	—5.1	89	18	3.41	—1.16	6.91	1.29	T.	10	15	7	9
1911	64.9	+4.4	98	23	3.76	—0.81	8.73	0.42	0.7	9	16	9	6
1912	62.7	+2.2	97	29	3.33	—1.24	6.41	0.72	0	10	14	11	6
1913	59.4	—1.1	102	30	6.24	+1.67	10.25	3.14	0	13	11	8	12
1914	62.2	+1.7	98	25	3.31	—1.26	6.90	0.30	T.	10	14	11	6
1915	56.1	—4.4	99	25	7.34	+2.77	13.21	3.82	T.	14	9	9	13
1916	59.9	—0.6	94	27	4.93	+0.36	10.44	2.14	T.	12	13	10	8
1917	55.1	—5.4	95	18	3.87	—0.70	7.33	1.69	0.6	10	15	8	8
1918	64.9	+4.4	98	9	6.87	+2.30	11.98	2.72	T.	13	13	11	7
1919	58.2	—2.3	93	30	3.11	—1.46	7.14	0.73	0	9	13	11	7
1920	59.4	—1.1	89	29	3.26	—1.31	5.73	0.62	0	8	14	9	8

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

JUNE.

June temperature averaged above the normal, though there was a slight deficiency in Jefferson, Wapello and Davis counties. There were four alternate cool and warm spells. The coldest weather of the month occurred at most stations on the 5th, and at a few stations in the northern division there was light frost. The most protracted warm spell began the latter part of the first week and continued till the first part of the third week. The second week of the month was the warmest June week since June 3-9, 1911, but humidities were 20 per cent lower than during a similar hot period last year, with the result that diseases of small grains were much less prevalent.

Precipitation averaged below normal for the State but there was a slight excess over the northern division and there were areas in the other two divisions that had an excess. The amounts were well distributed through the month but the greater portion occurred in two or three heavy showers over most of the State. The distribution as to amounts was uneven, stations relatively near each other showing wide positive and negative departures. The greatest deficiency occurred over the central and southwest portions and at the close of the month vegetation was needing rain badly over large areas in the drier sections, while at some points fields were too wet to be worked properly. Conditions generally were favorable and most field crops advanced to nearly normal by the end of the month.

Destructive winds occurred on the 1st, 8th, 9th and 15th. On the 1st high westerly winds caused slight damage in the vicinity of Plano and Centerville in Appanoose county. On the 8th strong southwest winds that reached hurricane force in places occurred generally in Plymouth county, the northern half of Woodbury county and portions of Cherokee, Sioux and O'Brien counties. The storm began about 10 or 11 p. m. and continued from one to two hours at many places. The most destructive wind was in the vicinity of Sioux City and around Pierson. Some crops were damaged but the principal loss was to buildings and machinery. At Sioux City the damage was estimated at $100,000, but estimates are not available at other places. Strong to high northwest winds swept Fayette and portions of Chickasaw, Bremer and Clayton counties during the early morning of the 9th, causing about $6,000 damage in western Fayette county and slight damage in other sections. High winds, of near hurricane force, at Anamosa, Jones county, on the 15th caused considerable damage.

A tornado occurred in the vicinity of Correctionville and Pierson, near the corners of Woodbury and Cherokee counties, from 11:00 to 11:30 p. m. of the 8th. The storm moved from southwest to northeast for a distance of about five miles and caused about $60,000 damage. Also on the morning of the 9th, a slight tornado occurred at Westgate, Fayette county, causing damage estimated at $8,000. No persons were killed or injured in either storm.

Hail occurred at many places during the month, mostly on the 7th and 8th.

Pressure. The mean pressure (reduced to sea level) for the State was 29.93 inches. The highest recorded was 30.33 inches at Charles City, on the 3d, and the lowest was 29.46 at Charles City and Sioux City on the 15th.

Temperature. The mean temperature for the State, as shown by the records of 99 stations, was 70.7°, or 1.6° higher than the normal. By division, three tiers of counties to the division, the means were as follows: Northern, 69.4°, or 1.8° higher than the normal; Central, 71.1°, or 1.8° higher than the normal; Southern, 71.5°, 1.2° higher than the normal. The highest monthly mean was 74.0°, at Burlington and Cedar Rapids, and the lowest was 67.4°, at Postville. The highest temperature was 99° at Cedar Rapids and Onawa, on the 13th, and the lowest was 40°, at Onawa on the 4th, Bedford, Earlham, Glenwood, Guthrie Center, Little Sioux and Thurman on the 5th, and Estherville on the 17th. The temperature range for the State was 59°.

Humidity. The average relative humidity for the State at 7 a. m. was 75 per cent, and at 7 p. m. was 55 per cent. The mean for the month was 65 per cent, or 5 per cent below the normal. The highest monthly mean was 68 per cent at Charles City and the lowest was 61 per cent at Des Moines and Keokuk.

Precipitation. The average precipitation for the State, as shown by the records for 107 stations, was 3.56 inches, or 0.82 inch less than the normal. By divisions the averages were as follows: Northern, 4.50 inches, or 0.07 inch more than the normal; Central, 3.14 inches, or 1.18 inches less than the normal; Southern, 3.04 inches, or 1.35 inches less than the normal. The greatest amount, 8.48 inches, occurred at Britt, and the least, 1.25 inches, at Des Moines. The greatest amount in 24 consecutive hours, 3.10 inches, occurred at Washta, on the 7th.

Wind. The prevailing direction of the wind was from the southwest. The highest velocity reported from a regular Weather Bureau Station was 72 miles an hour, from the southwest, at Sioux City, on the 8th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 69, or about normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 64; Davenport, 80; Des Moines, 64; Dubuque, 70; Keokuk, 83; Sioux City, 54; Omaha, Neb., 66.

Miscellaneous Phenomena. Fog: 2d, 22d, 23d. Frost: 3d, 5th, 18th. Hail: 1st, 6th, 7th, 8th, 9th, 10th, 15th, 16th, 21st, 22d, 26th, 29th, 30th. Halos, lunar or solar: 2d, 4th, 8th, 10th, 13th, 15th, 17th, 18th, 19th, 20th, 26th, 30th. Thunderstorms: All days during the month except on the 3d, 5th, 17th, 18th, 19th, 23d, 27th.

Rivers. Moderate stages prevailed on the Mississippi with a general falling tendency the first half of the month and rising stages the last half. On the Missouri moderate falling stages prevailed the first half and moderate to high increasing stages the last half of the month, the crest stage from the 27th to the 29th was about 1 foot below the flood stage. On the interior rivers low stages for the season prevailed.

COMPARATIVE DATA FOR THE STATE—JUNE.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	72.7	+3.6	106	44	7.76	+3.38	16.53	1.57	------	11	12	10	8
1891	69.1	0.0	99	37	5.39	+1.01	19.88	1.68	------	11	8	10	12
1892	69.2	+0.1	102	42	5.19	+0.81	14.16	0.67	------	10	12	11	7
1893	71.2	+2.1	100	40	3.91	—0.47	7.56	1.36	------	8	15	11	4
1894	73.2	+4.1	104	34	2.67	—1.71	6.20	0.57	------	7	16	10	4
1895	69.7	+0.6	102	34	4.32	—0.06	9.26	0.98	------	10	11	11	8
1896	69.1	0.0	100	40	3.11	—1.27	7.89	0.81	------	9	12	13	5
1897	69.1	0.0	103	29	3.81	—0.57	9.38	1.03	------	10	10	12	8
1898	71.4	+2.3	99	42	4.72	+0.34	12.48	1.90	------	9	13	10	7
1899	70.7	+1.6	100	42	5.04	+0.66	11.99	1.10	------	10	12	13	5
1900	69.7	+0.6	102	38	3.98	—0.40	12.35	0.67	------	5	17	10	3
1901	72.3	+3.2	106	30	3.71	—0.67	7.84	1.05	------	9	15	11	4
1902	65.2	—3.9	97	32	7.16	+2.78	16.04	1.46	------	14	8	11	11
1903	64.6	—4.5	96	30	2.86	—1.52	6.04	0.75	------	10	13	10	7
1904	67.1	—2.0	94	35	3.45	—0.93	8.35	0.44	------	7	13	10	7
1905	69.9	+0.8	100	36	5.53	+1.15	14.89	1.80	------	10	12	11	7
1906	67.9	—1.2	99	37	3.92	—0.46	8.27	1.48	------	8	15	10	5
1907	66.5	—2.6	98	36	5.35	+0.97	9.33	2.07	------	11	14	9	7
1908	67.1	—2.0	94	35	5.66	+1.28	11.88	1.77	------	13	12	10	8
1909	69.1	0.0	96	40	6.41	+2.03	13.30	2.80	------	13	12	10	8
1910	69.5	+0.4	105	33	1.99	—2.39	5.51	0.05	------	7	18	7	5
1911	75.7	+6.6	108	36	1.82	—2.56	6.28	0.06	------	5	20	8	2
1912	66.2	—2.9	101	34	2.74	—1.64	5.71	0.78	------	7	15	9	6
1913	71.5	+2.4	102	33	3.31	—1.07	8.95	0.74	------	7	19	8	3
1914	72.2	+3.1	101	40	5.57	+1.19	13.24	1.17	------	13	12	14	4
1915	65.1	—4.0	91	31	4.16	—0.22	9.99	1.72	------	11	12	12	6
1916	64.5	—4.6	96	38	3.71	—0.67	7.96	1.41	------	10	13	11	6
1917	66.0	—3.1	100	32	6.65	+2.27	13.82	3.04	------	12	13	10	7
1918	70.8	+1.7	104	38	5.29	+0.91	10.19	1.55	------	11	16	10	4
1919	71.9	+2.8	98	41	6.13	+1.75	12.25	1.82	------	13	12	12	6
1920	70.7	+1.6	99	40	3.56	—0.82	8.48	1.25	------	9	16	10	4

T. indicates an amount too small to measure, or less than .005 inch rainfall and less than .05 inch snowfall.

JULY.

The temperature averaged below normal the deficiency for each division being quite uniform, though a few stations in the western portion of the State showed a slight excess. The greatest deficiencies were confined almost entirely to the northeast section. The month was more pleasant than the average July, there being no protracted periods of hot, sultry weather and during the greater part of the month the temperature was below normal. Temperatures of 100°, or higher, were reported from but two stations.

The precipitation for the State as a whole showed a slight excess but the distribution was uneven, varying from slightly more than an inch to nearly 7.50 inches. The distribution as to time was also uneven, considerably more than half occurring during the first week and more than 80 per cent occurring during the first two weeks. During the last of the month only scattered thundershowers occurred and rain was needed at the close of the month over the State generally. In large areas bordering the Mississippi and Missouri rivers the drouth was becoming serious.

During the afternoon of the 1st, from about 5:45 till 6:10 p. m. a tornado occurred in the southern portion of Adams County. The storm moved first from the northwest to southeast then turned and moved to the northeast, the total path being about 20 miles. The width of the storm was narrow and at points the funnel did not reach the earth, but where it was in contact with the earth everything in its way was destroyed, the loss to crops and buildings amounted to about $100,000. There was no loss of lives but 4 persons were injured and the occupants of one residence had a remarkable escape from being burned to death in a wrecked house that caught fire and burned up.

Hail storms were unusually numerous, destructive and widely distributed over the State. The worst storm reported was in the northwest portion of Scott county on the 9th, and the damage there was estimated at about $100,000. The principal damage was in a strip about 12 miles long, varying from about one and three-fourths to about 9 miles wide, extending from 3 miles southeast of New Liberty to about 3 miles south of Maysville. The path of greatest damage was about 6 miles long and about one and one-half miles wide. The stones varied from about 0.2 inch to 0.7 inch in diameter but some were said to be 1.5 inches. The damage from hail in other portions of the State was large. The storms reported shows losses to crops approximating $1,000,000, but it is probable that the loss was considerably more than that amount.

Pressure. The mean pressure (reduced to sea level) for the State was 30.00 inches. The highest pressure recorded was 30.32 inches at Dubuque on the 26th, and the lowest was 29.64 at Des Moines on the 6th. The monthly range was 0.68 inch.

Temperature. The mean temperature for the State, as shown by the records of 97 stations, was 72.3°, or 1.8° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 71.2°, or 1.5° lower than the normal; Central, 72.3°, or 2.0° lower than the normal; Southern, 73.5°, or 1.7° lower than the normal. The highest monthly mean was 76.4°, at Omaha, Neb., and the lowest was 67.6°, at Postville. The highest temperature reported was 102°, at Clarinda, on the 23d, and the lowest was 45°, at Earlham, on the 27th. The temperature range for the State was 57°.

Humidity. The average relative humidity for the State at 7 a. m. was 78 per cent, and at 7 p. m. it was 55 per cent. The mean for the State was 66 per cent, or 2 per cent lower than the normal. The highest monthly mean was 70 per cent, at Charles City and the lowest was 64 per cent at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 104 stations, was 4.22 inches, or 0.26 inch more than the normal. By divisions the averages were as follows: Northern, 4.46 inches, or 0.58 inch more than the normal; Central, 3.59 inches, or 0.39 inch less than the normal; Southern, 4.61 inches, or 0.59 inch more than the normal. The greatest amount, 7.49 inches, occurred at Stockport, and the least, 1.11 inches at Dubuque. The greatest amount in 24 consecutive hours was 3.32 inches, at Albia, on the 13th.

Wind. The prevailing direction of the wind was from the southwest. The highest velocity reported from a regular Weather Bureau Station was 57 miles per hour, from the west, at Sioux City, on the 4th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 73, or about 1 per cent below the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 69; Davenport, 83; Des Moines, 74; Dubuque, 72; Keokuk, 80; Sioux City, 64; Omaha, Neb., 77.

Miscellaneous Phenomena. Hail, 1st, 2d, 3d, 4th, 7th, 8th, 9th, 12th, 13th, 14th, 15th, 16th, 17th, 20th, 22d, 23d. Halos, (lunar or solar) 3d, 4th, 12th, 24th, 25th, 29th. Rainbows, 5th, 7th. Thunderstorms, all days except 11th, 24th, 26th, 27th, 28th.

Rivers. Moderately high stages prevailed in the principal rivers, with slight fluctuations during the first half of the month, after which generally falling stages prevailed with the lowest stage on the last day of the month. Rather high stages occurred in the interior rivers during the first half of the month and flood stages occurred at Ottumwa on the 14th, 15th and 16th.

COMPARATIVE DATA FOR THE STATE—JULY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	75.6	+1.5	110	45	1.98	—1.98	5.00	0.37	------	3	18	8	5
1891	68.5	—5.6	99	41	4.22	+0.26	8.20	1.67	------	8	13	13	5
1892	73.0	—1.1	104	38	5.29	+1.33	12.86	1.71	------	9	16	10	5
1893	75.0	+0.9	102	47	3.33	—0.63	8.84	1.49	------	7	19	10	2
1894	76.4	+2.3	109	39	0.63	—3.33	3.50	T.	------	3	22	8	1
1895	72.1	—2.0	104	35	3.40	—0.56	10.10	0.45	------	7	15	12	4
1896	73.6	—0.5	104	42	6.90	+2.94	12.67	1.61	------	9	14	11	6
1897	75.6	+1.5	106	42	3.26	—0.70	7.60	1.01	------	6	18	10	3
1898	73.4	—0.7	102	42	2.98	—0.98	12.88	0.55	------	7	19	9	3
1899	73.1	—1.0	101	38	3.07	—0.89	8.66	0.42	------	7	16	10	5
1900	73.4	—0.7	102	37	6.15	+2.19	18.45	1.80	------	9	16	10	5
1901	82.4	+8.3	113	46	2.34	—1.62	5.97	0.27	------	5	21	9	1
1902	73.1	—1.0	99	41	8.67	+4.71	13.57	4.82	------	13	14	10	7
1903	72.9	—1.2	100	40	4.83	+0.87	12.72	0.94	------	9	17	9	5
1904	70.6	—3.5	100	38	4.41	+0.45	11.97	1.28	------	10	16	9	6
1905	70.6	—3.5	102	40	2.91	—1.05	7.08	0.69	------	9	14	10	7
1906	70.9	—3.2	102	42	3.04	—0.92	7.05	0.26	------	8	18	10	3
1907	73.7	—0.4	102	41	7.27	+3.31	13.66	3.97	------	13	16	11	4
1908	73.0	—1.1	100	42	3.66	—0.30	9.21	0.70	------	8	16	10	5
1909	72.3	—1.8	102	46	4.77	+0.81	12.20	1.20	------	10	15	8	8
1910	74.5	+0.4	108	43	1.86	—2.10	5.69	0.12	------	7	19	8	4
1911	75.5	+1.4	111	38	2.27	—1.69	6.62	0.08	------	7	18	10	3
1912	74.6	+0.5	103	38	3.71	—0.25	7.56	1.17	------	10	17	10	4
1913	76.1	+2.0	108	45	1.82	—2.14	6.23	T.	------	5	21	8	2
1914	76.6	+2.5	109	43	2.27	—1.69	6.50	0.44	------	5	20	8	3
1915	69.5	—4.6	92	40	8.32	+4.36	15.83	3.68	------	14	10	12	9
1916	79.7	+5.6	105	48	1.78	—2.18	6.87	0.10	------	5	23	7	1
1917	74.3	+0.2	106	38	2.27	—1.69	6.06	0.23	------	7	21	8	2
1918	73.1	—1.0	105	40	3.17	—0.79	8.05	0.26	------	8	19	8	4
1919	77.4	+3.3	104	41	2.86	—1.10	7.82	0.39	------	6	22	8	1
1920	72.3	—1.8	102	45	4.22	+0.26	7.49	1.11	------	9	19	9	3

T. indicates an amount too small to measure, or less than .005 inch rainfall and less than .05 inch snowfall.

AUGUST.

August, like July, was deficient in temperature and too cool for the proper development of corn and at the close of the month much of the crop had not advanced beyond the roasting-ear stage. The deficiency was quite uniform over each division though the range varied greatly along the Mississippi. The usual hot periods were absent and the temperature was above normal for but short intervals and the hottest weather occurred during the first ten days. At a number of stations in each division the maximum temperature did not reach 90°.

The precipitation, while averaging slightly below normal, was very unevenly distributed. A large number of stations over the northern division and a few in the central and southern had a decided excess of precipitation and many stations that were decidedly deficient in July, particularly in the southeastern and southwestern portions of the State, showed a pronounced deficiency with drouth becoming serious at the close of the month. The heavy rains of the 19th-20th caused serious loss to crops in Carroll, Greene, Humboldt and Hancock Counties. Hail damage occurred principally on the 6th and 8th in Plymouth, Union, Ringgold, Jasper, Iowa, Allamakee, Clayton, Linn, Johnson and Des Moines Counties. The worst storm occurred in Ringgold County, the loss to growing crops in about 25 sections in Lots Creek, Middle Park and Poe Townships amounted to from 25 to more than 50 per cent. The damage was extensive also in Allamakee County over the northeast corner of Iowa Township. A very heavy downpour of rain occurred in Carroll and Greene Counties between Scranton and Glidden, amounting to 5 inches in from two to three hours, causing small streams to get out of banks and doing great damage to bridges and culverts. The loss to bridges and culverts is estimated at $10,000 in each county and the loss to crops probably as great.

Pressure. The mean pressure (reduced to sea level) for the State was 30.02 inches. The highest recorded was 30.37 inches at Dubuque, on the 23d, and the lowest was 29.56 inches at Sioux City on the 28th. The monthly range was 0.81 of an inch.

Temperature. The mean temperature for the State, as shown by the records of 105 stations, was 69.3°, or 2.5° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 67.7°, or 2.7° lower than the normal; Central, 69.4°, or 2.3° lower than the normal; Southern, 70.7°, or 2.5° lower than the normal. The highest monthly mean was 73.4° at Burlington and Keokuk, and the lowest was 65.4°, at Decorah and Spencer. The highest temperature recorded was 98° at Monroe on the 5th and Clarinda on the 10th, and the lowest was 39° at Decorah and Stockport, on the 24th. The temperature range for the State was 59°.

Precipitation. The average precipitation for the State, as shown by the records of 109 stations, was 3.35 inches, or 0.33 inch less than the normal. By divisions the averages were as follows: Northern, 3.98 inches, or 0.50 inch more than the normal; Central, 3.41 inches, or 0.36 inch less than the normal; Southern, 2.67 inches, or 1.11 inches less than the normal. The greatest amount, 8.52 inches occurred at Britt, and the least 0.44 inch, at Burlington. The greatest amount in 24 hours, 4.17 inches, occurred at Humboldt, on the 20th.

Humidity. The average relative humidity for the State at 7 a. m. was 81 per cent, and at 7 p. m. it was 58 per cent. The mean for the month was 70 per cent, or 2 per cent lower than the normal. The highest monthly mean was 74 per cent, at Charles City and Dubuque, and the lowest was 66 per cent at Keokuk.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported from a regular Weather Bureau station was at the rate of 39 miles per hour, from the northwest, at Sioux City, on the 6th.

Sunshine. The average per cent of the possible amount of sunshine was 69, or 2 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 64; Davenport, 73; Des Moines, 71; Dubuque, 65; Keokuk, 71; Sioux City, 73; Omaha, Neb., 66.

Miscellaneous Phenomena. Aurora, 21st. Fog, 4th, 6th, 8th, 9th, 14th, 15th, 20th, 24th. Frost, (light), 23d, 24th, 25th. Hail, 6th, 7th, 8th, 30th. Halos (lunar or solar), 7th, 10th, 22d, 28th, 30th, 31st. Haze, 16th. Rainbow, 19th. Thunderstorms, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 15th, 19th, 20th, 21st, 22d, 27th, 28th, 29th, 30th, 31st.

Rivers. Except for a few slight and unimportant rises, moderate, falling stages prevailed on the principal rivers. On the main streams of the interior rivers no unusually high stages prevailed but on the smaller streams in Carroll, Greene, Humboldt and Hancock County local floods occurred following the heavy rains of the 19th-20th.

COMPARATIVE DATA FOR THE STATE—AUGUST.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	68.4	—3.4	102	36	3.41	—0.27	6.44	1.02	------	8	15	10	6
1891	69.1	—2.7	106	34	4.24	+0.56	13.02	1.23	------	8	13	12	6
1892	71.4	—0.4	102	40	2.24	—1.44	4.69	0.65	------	5	18	9	4
1893	69.4	—2.4	101	30	2.32	—1.26	6.22	0.40	------	5	19	9	3
1894	74.6	+2.8	108	38	1.58	—2.10	4.53	T.	------	4	21	8	2
1895	71.9	+0.1	103	37	4.43	+0.75	10.63	0.67	------	7	17	9	5
1896	71.7	—0.1	104	34	3.52	—0.16	12.25	0.86	------	8	15	11	5
1897	68.9	—2.9	104	35	1.86	—1.82	4.98	0.47	------	6	15	11	5
1898	71.2	—0.6	103	40	3.44	—0.24	10.55	0.58	------	6	17	9	5
1899	74.4	+2.6	100	41	3.68	0.00	10.45	1.12	------	7	17	10	4
1900	77.4	+5.6	103	44	4.65	+0.97	10.43	1.26	------	6	18	10	3
1901	73.8	+2.0	105	40	1.29	—2.39	4.46	T.	------	5	20	9	2
1902	69.1	—2.7	98	37	6.58	+2.90	15.47	1.57	------	11	11	11	9
1903	69.1	—2.7	101	41	6.64	+2.96	17.74	2.55	------	11	12	10	9
1904	69.1	—2.7	97	35	3.43	—0.25	6.75	0.66	------	7	17	8	6
1905	74.3	+2.5	104	44	4.05	+0.37	8.47	1.04	------	9	16	9	6
1906	74.1	+2.3	101	33	3.95	+0.27	10.51	0.92	------	9	17	9	5
1907	71.1	—0.7	99	37	4.33	+0.65	9.67	1.05	------	9	17	9	5
1908	70.0	—1.8	101	38	4.77	+1.09	10.55	1.35	------	9	17	9	5
1909	76.1	+4.3	103	33	1.81	—1.87	8.21	T.	------	5	21	8	2
1910	71.9	+0.1	104	36	3.88	+0.20	11.22	0.37	------	8	15	10	6
1911	71.7	—0.1	107	34	3.32	—0.36	9.47	0.44	------	9	16	10	5
1912	71.0	—0.8	101	40	3.78	+0.10	7.90	0.89	------	10	15	10	6
1913	76.6	+4.8	108	40	2.68	—1.00	7.13	0.08	------	6	17	10	4
1914	73.7	+1.9	103	40	2.19	—1.49	4.90	0.42	------	7	17	10	4
1915	65.9	—5.9	91	30	2.81	—0.87	9.14	0.27	------	8	16	8	7
1916	74.0	+2.2	106	35	2.58	—1.10	6.23	0.49	------	7	18	9	4
1917	69.4	—2.4	102	31	2.29	—1.39	6.31	0.70	------	7	19	8	4
1918	76.0	+4.2	113	38	3.61	—0.07	8.38	0.54	------	8	16	10	5
1919	71.5	—0.3	103	38	2.59	—1.09	5.72	0.97	------	7	19	9	3
1920	69.3	—2.5	98	39	3.35	—0.33	8.52	0.44	------	7	18	8	5

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

SEPTEMBER.

The outstanding feature of the weather for September was the unusually favorable condition that prevailed from the 10th to the 28th, inclusive. Aside from the first day, which was warm, the first nine days were cold and wet and the prospects for a normal amount of the corn crop maturing were discouraging, as both July and August were too cool for the normal development of that crop. However, on the 10th a warm period that resembled July weather, set in and it continued unbroken till the 28th, when it was brought to an abrupt ending, with heavy to killing frosts over most of the western and central portions and light to heavy frosts over the eastern portion. During this warm period corn made rapid progress toward maturity and when frost came about 85 per cent of the crop was safe and fortunately over the western half of the State, where the frost was most severe, the greater per cent of the crop was out of danger of frost and much was in the shock.

The precipitation occurred principally during the first nine days but periods of general precipitation also occurred on the 23d and 26th but the amounts on these days were mostly light. The greatest precipitation occurred over about one third of the State in a strip running north and south in the middle section. Over much of the eastern and western sections the precipitation which had been deficient in previous months continued deficient during September and over large areas the soil was too hard and dry to prepare for winter grain, but where wheat had been seeded under favorable conditions the early sown was up in good condition at the end of the month.

Strong winds prevailed generally from the 20th to the 25th which blew down corn and many fields were in a badly tangled condition, but they hastened the maturity of the corn.

A very strange meteor was observed by Mr. Arthur Betts, at Nora Springs, during the early evening of September 6th. It was at an elevation of about 30° in the west-southwest and of about the brilliancy of Venus. It gradually faded out of existence, leaving no trail behind it.

Pressure. The mean pressure (reduced to sea level) for the State was 29.98 inches. The highest recorded was 30.43 inches, at Sioux City and Omaha, Neb. on the 29th, and the lowest was 29.38 inches, at Sioux City, on the 23d. The monthly range was 1.05 inches.

Temperature. The mean temperature for the State, as shown by the records of 94 stations was 66.5°, or 3.1° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 65.1°, or 3.3° higher than the normal; Central, 66.6°, or 3.1° higher than the normal; Southern, 67.7°, or 2.7° higher than the normal. The highest monthly mean was 70.0°, at Burlington, and the lowest was 62.8°, at Northwood. The highest temperature reported was 98° at Onawa, on the 19th, and Maquoketa on the 20th, and the lowest was 24° at Little Sioux and Sanborn, on the 30th. The temperature range for the State was 74°.

Humidity. The average relative humidity for the State at 7:00 a. m. was 83 per cent and at 7:00 p. m. was 61 per cent. The mean for the month was 72 per cent, which is 2 per cent below normal. The highest monthly mean was 80 per cent at Charles City, and the lowest was 67 per cent at Sioux City.

Precipitation. The average precipitation for the State, as shown by the records of 102 stations, was 3.30 inches, or 0.06 inch below the normal. By divisions, the averages were as follows: Northern, 3.54 inches, or 0.49 inch more than the normal; Central, 2.86 inches, or 0.60 inch less than the normal; Southern, 3.51 inches, or 0.05 inch less than the normal. The greatest amount, 7.21 inches, occurred at Afton, and the least, 0.69 inch, at Cedar Rapids. The greatest amount in 24 consecutive hours, 3.77 inches, occurred at Boone on the 9th.

Wind. The prevailing direction of the wind was from the south. The highest velocity reported from a regular Weather Bureau Station was at the rate of 53 miles an hour from the south at Sioux City, on the 25th.

Sunshine. The average per cent of the possible amount of sunshine was 68, which is 5 per cent above normal. The per cent of the possible amount at regular Weather Bureau Stations was as follows: Charles City, 56; Davenport, 68; Des Moines, 68; Dubuque, 59; Keokuk, 66; Sioux City, 78; Omaha, Neb., 73.

Miscellaneous Phenomena. Aurora, 7th, 10th, 17th, 28th, 30th. Fog, 2d, 3d, 4th, 5th, 6th, 9th, 10th, 11th, 12th, 20th, 27th, 28th, 30th. Frost (light), 28th, 29th, 30th, (heavy), 29th, 30th, (killing), 29th, 30th. Hail, 3d, 4th, 5th, 10th 26th, 29th. Halos (lunar or solar), 1st, 10th, 14th, 21st, 22d. Meteor, 6th, 20th. Thunderstorms, 1st, 2d, 3d, 4th, 5th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 19th, 23d, 24th, 25th, 26th.

Rivers. On the principal rivers low, slowly falling stages prevailed during practically the entire month. On the interior rivers a few slight rises occurred resulting from locally heavy rainfall but during the greater part of the month low, and nearly stationary stages prevailed.

COMPARATIVE DATA FOR THE STATE—SEPTEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	59.3	—4.1	96	23	2.97	—0.39	4.85	1.36	------	7	13	10	7
1891	67.3	+3.9	104	28	1.33	—2.03	3.60	0.13	------	4	20	7	3
1892	64.7	+1.3	99	29	1.53	—1.83	4.15	0.16	------	4	16	8	6
1893	64.7	+1.3	102	18	2.34	—1.02	5.49	0.74	------	4	20	6	4
1894	65.1	+1.7	100	26	3.57	+0.21	7.43	0.67	------	8	15	10	5
1895	66.8	+3.4	103	22	3.03	—0.33	7.43	0.85	------	5	18	8	4
1896	58.5	—4.9	95	22	4.09	+0.73	9.96	1.82	------	10	11	9	10
1897	70.9	+7.5	106	26	2.04	—1.32	5.88	0.00	------	4	23	5	2
1898	65.3	+1.9	99	29	2.69	—0.67	8.45	0.41	------	7	16	9	5
1899	62.5	—0.9	104	15	0.93	—2.43	4.32	T.	------	4	16	9	5
1900	64.4	+1.0	99	26	4.98	+1.62	8.82	2.48	------	9	15	8	7
1901	63.3	—0.1	102	26	4.77	+1.41	13.62	1.71	------	9	13	9	8
1902	59.1	—4.3	88	23	4.35	+0.99	10.41	1.65	------	9	15	6	9
1903	60.8	—2.6	94	28	3.81	+0.45	8.79	1.42	------	10	14	6	10
1904	64.0	+0.6	94	30	2.78	—0.58	8.33	0.09	------	7	13	8	9
1905	65.8	+2.4	96	36	3.81	+0.45	13.18	0.50	------	8	14	8	8
1906	67.2	+3.8	100	27	4.16	+0.80	11.10	0.64	------	8	16	8	6
1907	62.8	—0.6	98	25	2.75	—1.61	6.06	1.38	------	8	15	9	6
1908	67.9	+4.5	98	20	1.20	—2.16	3.46	0.25	------	3	21	6	3
1909	62.4	—1.0	94	30	3.58	+0.22	7.34	1.39	------	9	14	8	8
1910	63.2	—0.2	99	30	3.59	+0.23	7.43	1.18	------	9	14	7	9
1911	65.8	+2.4	103	32	5.12	+1.76	13.73	1.19	------	10	11	9	10
1912	62.1	—1.3	104	24	3.98	+0.62	10.12	0.28	------	11	12	8	10
1913	64.5	+1.1	107	19	3.31	—0.05	7.44	0.45	------	9	15	8	7
1914	64.5	+1.1	99	30	7.88	+4.52	16.24	2.48	------	10	16	7	7
1915	63.7	+0.3	91	30	6.03	+2.67	12.45	2.88	------	11	11	8	11
1916	62.5	—0.9	98	21	3.89	+0.53	9.71	1.45	------	7	17	8	5
1917	62.6	—0.8	97	28	2.90	—0.46	8.68	0.39	------	7	15	7	8
1918	58.6	—4.8	93	20	1.87	—1.49	4.62	0.48	------	6	16	8	6
1919	67.5	+4.1	99	33	5.34	+1.98	11.82	1.49	------	8	16	6	8
1920	66.5	+3.1	98	24	3.30	—0.06	7.21	0.69	------	8	17	8	5

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

OCTOBER.

October, 1920, was next to the warmest October of record for the State as a whole. In 1900 the October mean temperature was 59.3° which is 1.6° higher than the current month. Cold weather at the beginning was followed by warmer on the 3d, after which temperatures continued above normal till the first part of the last week. Killing frost or freezing temperatures occurred at most stations on the 1st, except along the Mississippi River in the central and southern divisions. On the 29th, killing frost covered these sections also. Not more than 10 per cent of the corn crop was damaged by frost. There was some damage to late truck crops. Unusually favorable conditions during the last two-thirds of September and the greater part of October, matured the greatest corn crop of record in Iowa. During the latter half of October, corn husking made good progress generally but high temperatures in connection with locally heavy rains in the north-central district made it unsafe to crib corn in large quantities in that section.

The first 10 days were practically rainless and conditions were unusually favorable for farm work and harvesting sugar beets, potatoes, onions, etc. After the 10th precipitation was frequent but the amounts were generally light to moderate and did not hinder farm work materially. Winter wheat made a vigorous growth and pastures improved greatly.

Pressure. The mean pressure (reduced to sea level) for the State was 30.04 inches. The highest recorded was 30.54 inches at Dubuque and Charles City, on the 5th, and the lowest was 29.54 inches, at Sioux City, on the 13th. The monthly range was 1.00 inch.

Temperature. The mean temperature for the State, as shown by the records of 101 stations, was 57.7°, or 6.9° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 55.9°, or 6.9° higher than the normal; Central, 58.0°, or 7.1° higher than the normal; Southern, 59.3°, or 6.7° higher than the normal. The highest monthly mean was 61.6°, at Keokuk, and the lowest was 54.0°, at Northwood. The highest temperature reported was 90°, at Waterloo, on the 11th, and the lowest was 15°, at Decorah, Earlham, Pella, Sigourney and Williamsburg, on the 29th. The temperature range for the State was 75°.

Humidity. The average relative humidity for the State at 7 a. m. was 81 per cent, and at 7 p. m. it was 60 per cent. The mean for the month was 70 per cent, or 2 per cent less than the normal. The highest monthly mean was 81 per cent, at Charles City, and the lowest was 64 per cent, at Omaha, Neb. The lowest observed was 22 per cent, at Davenport, on the 4th.

Precipitation. The average precipitation for the State, as shown by the record of 106 stations, was 2.13 inches, or 0.33 inch less than the normal. By divisions the averages were as follows: Northern, 2.51 inches or 0.17 inch more than the normal; Central, 2.27 inches, or 0.22 inch less than the normal; Southern, 1.62 inches, or 0.92 inch less than the normal. The greatest amount, 4.64 inches, occurred at Charles City, and the least, 0.48 inch, occurred at Williamsburg. The greatest amount in 24 consecutive hours, 2.82 inches, occurred at Charles City, on the 14th-15th.

Snow. Light snow flurries occurred in each division during the last few days of the month, but Dubuque, with 0.1 inch, was the only station that reported more than a trace of snow.

Wind. The prevailing direction of the wind was south. The highest velocity reported from a regular Weather Bureau Station was 36 miles per hour, from the south, at Sioux City on the 13th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 65, or 3 per cent greater than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 53; Davenport, 62; Des Moines, 69; Dubuque, 59; Keokuk, 71; Sioux City, 72; Omaha, Neb., 69.

Miscellaneous Phenomena. Aurora, 7th, 9th, 10th, 17th, 18th, 22d. Fog, 2d, 6th, 16th, 17th, 18th, 21st, 23d, 25th, 26th, 29th. Frost (killing), 1st, 2d, 24th, 28th, 29th. Hail, 11th, 12th, 13th, 14th, 26th. Halos (lunar or solar), 17th, 19th, 20th, 22d, 23d, 24th, 30th. Haze, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 19th, 20th, 22d, 29th. Meteors, 1st, 3d, 6th, 9th, 10th, 13th, 16th, 18th, 19th, 24th. Rainbows, 15th, 20th, 22d. Thunderstorms, 10th, 11th, 12th, 13th, 14th, 15th, 19th, 20th, 21st, 22d.

COMPARATIVE DATA FOR THE STATE—OCTOBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	49.2	—1.6	86	16	3.48	+1.02	6.82	1.59	------	7	11	11	9
1891	50.0	—0.8	92	19	2.77	+0.31	6.53	0.85	------	6	18	7	6
1892	54.5	+3.7	96	14	1.55	—0.91	2.58	0.00	0.0	4	21	6	4
1893	52.4	+1.6	94	10	1.28	—1.18	4.56	0.02	0.0	4	16	9	6
1894	51.7	+0.9	90	20	2.67	+0.21	5.25	0.03	0.2	8	14	8	9
1895	46.0	—4.8	88	4	0.47	—1.99	1.38	0.00	T.	2	19	8	4
1896	47.9	—2.9	88	12	3.13	+0.67	5.05	1.51	T.	5	18	6	7
1897	56.8	+6.0	97	12	1.14	—1.32	3.30	0.03	0.0	4	17	8	6
1898	47.5	—3.3	88	17	3.56	+1.10	5.75	1.27	3.6	8	7	9	15
1899	56.7	+5.9	95	17	1.73	—0.73	4.64	0.15	0.0	5	17	8	6
1900	59.3	+8.5	90	21	3.91	+1.45	8.00	1.20	0.0	7	16	7	8
1901	54.2	+3.4	88	20	1.98	—0.48	4.23	0.45	T.	6	17	7	7
1902	53.5	+2.7	83	20	2.54	+0.08	6.66	0.28	T.	5	16	8	7
1903	52.2	+1.4	90	16	1.95	—0.51	4.50	0.32	0.0	5	19	6	6
1904	53.1	+2.3	96	16	1.67	—0.79	4.43	0.14	T.	6	15	8	8
1905	49.2	—1.6	95	16	3.40	+0.94	5.36	1.20	1.6	8	16	6	9
1906	50.5	—0.3	87	7	1.96	—0.50	4.25	0.50	0.1	6	14	7	10
1907	50.4	—0.4	85	10	1.50	—0.96	3.71	0.30	0.0	5	20	5	6
1908	51.1	+0.3	89	17	3.38	+0.92	8.83	0.58	2.6	8	16	6	9
1909	49.7	—1.1	97	10	2.22	—0.24	4.70	0.48	T.	6	16	6	9
1910	55.2	+4.4	93	10	0.77	—1.69	1.73	T.	0.1	4	21	4	6
1911	48.7	—2.1	87	14	3.34	+0.88	7.03	0.73	0.6	10	12	8	11
1912	52.2	+1.4	92	16	2.98	+0.52	5.77	1.03	T.	6	21	3	7
1913	49.2	—1.6	89	—2	3.03	+0.57	7.29	0.35	1.2	9	15	8	8
1914	55.9	+5.1	88	14	3.23	+0.77	6.64	0.74	T.	9	16	6	9
1915	54.4	+3.6	86	19	1.31	—1.15	3.25	T.	T.	5	19	6	6
1916	50.9	+0.1	92	6	2.00	—0.46	4.33	0.20	2.0	8	16	7	8
1917	42.9	—7.9	85	0	1.41	—1.05	4.00	0.15	2.2	6	10	11	10
1918	55.1	+4.3	93	21	3.64	+1.18	7.56	1.36	0.8	7	13	7	11
1919	50.7	—0.1	89	8	3.02	+0.56	8.65	0.45	T.	10	11	8	12
1920	57.7	+6.9	90	11	2.13	—0.33	4.64	0.48	T.	6	19	6	6

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

NOVEMBER.

The mean temperature for the State as a whole averaged less than one half degree above the normal the excess being confined to the northern and central divisions, though there were small areas in both these divisions with the temperature below normal. Most of the first week was above normal, but on the 10th the first cold wave of the season spread over the State and the temperature remained below normal till the 17th, when a decided change to warmer occurred and during the rest of the month mostly mild weather prevailed. The first part of the month was favorable for farm work and good progress was made in gathering corn until the 19th, when the fields became too soft for wagons. As a result of this unfavorable condition only 77 per cent of the corn crop had been gathered at the end of November while the usual amount at this time is 90 per cent. However this warm weather and an ample supply of moisture was favorable for winter grain, which made good growth, and at the end of the month was well established. The weather was also favorable for harvesting sugar beets which was completed before the close of the month. The maximum temperature for the State was 71° and the minimum 5°, making an absolute range of 66° which is the least ever recorded since state wide records began in 1890.

Precipitation was evenly distributed throughout the month with an average of 8 rainy days for the State, which has been exceeded but once in November in 31 years. The per cent of sunshine was decidedly below normal and the number of cloudy days is the greatest in the history of the State.

Pressure. The mean pressure (reduced to sea level) for the State was 30.16 inches. The highest recorded was 30.82 inches, at Sioux City, on the 12th, and the lowest was 29.54 inches, at Davenport and Dubuque, on the 21st. The monthly range was 1.28 inches.

Temperature. The mean temperature for the State, as shown by the records of 93 stations was 35.4°, or 0.4°, higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 33.5°, or 0.7° higher than the normal; Central, 35.7°, or 0.1° lower than the normal. The highest monthly mean was 39.2°, at Burlington and Keokuk, and the lowest was 32.4°, at Fayette and Sanborn. The highest temperature recorded was 71° at Oskaloosa, on the 19th, and Fairfield, on the 20th, and the lowest was 5°, at Sanborn, on the 11th, West Bend on the 12th and Earlham on the 16th. The temperature range for the State was 66°.

Humidity. The average relative humidity for the State at 7 a. m. was 84 per cent and at 7 p. m. 73 per cent. The mean for the month was 78 per cent or 2 per cent above normal. The highest mean was 81 per cent at Charles City, and the lowest was 72 per cent, at Keokuk.

Precipitation. The average precipitation for the State as shown by the records of 98 stations, was 2.18 inches, or 0.67 inch above the normal. By divisions the averages were as follows: Northern, 2.69 inches, or 1.28 inches greater than the normal; Central, 2.23 inches, or 0.70 inch greater than the normal; Southern, 1.62 inches, or 0.04 inch greater than the normal. The greatest amount, 4.45 inches occurred at Humboldt, and the least, 0.73 inch, at Lamoni. The greatest amount in 24 consecutive hours, 1.60 inches, occurred at Humboldt, on the 29th.

Snowfall. The average fall for the State was 1.2 inches, or 1.3 inches less than the normal. Many stations in all portions of the State reported but a trace and snow did not remain on the ground at any station for more than two days.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau station was at the rate of 54 miles per hour, from the northwest, at Sioux City, on the 1st.

Sunshine. The average per cent of the possible amount of sunshine was 37, or 17 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 26; Davenport, 41; Des Moines, 50; Dubuque, 34; Keokuk, 41; Sioux City, 32; Omaha, Neb., 38.

Miscellaneous Phenomena. Aurora, 13th. Fog, 6th, 7th, 8th, 16th, 17th, 20th, 23d, 24th, 26th, 27th, 28th, 29th, 30th. Halos, 5th, 17th; 18th; 20th; 23d, 25th, 27th. Meteors, 5th, 9th, 16th. Sleet, 9th, 22d, 23d, 26th. Thunderstorms, 1st, 6th.

COMPARATIVE DATA FOR THE STATE—NOVEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 In. or more	Clear	Partly cloudy	Cloudy
1890	38.6	+3.6	78	— 2	1.46	—0.05	3.55	0.71	------	3	15	8	7
1891	30.5	—4.5	84	—24	1.70	+0.19	3.64	0.66	------	7	10	8	12
1892	33.3	—1.7	70	— 3	1.10	—0.41	3.16	0.05	1.8	4	11	8	11
1893	34.0	—1.0	86	—13	1.17	—0.34	2.56	0.05	4.6	4	16	8	6
1894	32.7	—2.3	72	— 5	0.92	—0.59	2.42	T.	0.4	4	9	11	10
1895	34.3	—0.7	86	—12	1.51	0.00	3.01	0.45	4.9	6	9	8	13
1896	29.6	—5.4	82	—15	1.83	+0.32	4.51	0.16	2.9	6	9	8	13
1897	34.3	—0.7	81	—19	0.66	—0.85	2.24	T.	1.2	5	12	8	10
1898	32.2	—2.8	78	—17	1.50	—0.01	3.61	0.33	8.7	6	14	8	8
1899	43.9	+8.9	86	8	1.20	—0.31	2.97	0.13	0.5	5	12	8	10
1900	33.5	—1.5	79	— 6	1.06	—0.45	3.35	T.	3.7	6	12	7	11
1901	35.8	+0.8	77	2	0.86	—0.65	2.30	0.20	2.6	3	18	6	6
1902	41.2	+6.2	79	4	2.13	+0.62	4.19	0.16	1.8	7	9	7	14
1903	34.2	—0.8	76	— 5	0.52	—0.99	1.74	T.	1.1	3	13	8	9
1904	41.0	+6.0	80	4	0.15	—1.36	0.50	0.00	0.5	1	20	6	4
1905	38.4	+3.4	70	—12	2.84	+1.33	5.30	0.90	0.6	5	16	7	7
1906	35.4	+0.4	76	— 5	2.03	+0.52	3.86	0.35	4.4	8	9	7	14
1907	36.7	+1.7	68	— 4	1.03	—0.48	2.27	0.05	0.9	4	17	6	7
1908	39.3	+4.3	80	5	1.56	+0.05	3.31	0.21	1.4	5	14	7	9
1909	42.4	+7.4	84	— 3	5.39	+3.88	11.48	2.07	6.8	10	10	7	13
1910	33.4	—1.6	76	5	0.34	—1.17	1.03	T.	0.7	3	13	9	8
1911	29.9	—5.1	79	— 8	1.42	—0.09	4.99	0.11	1.6	6	11	8	11
1912	40.1	+5.1	77	6	0.98	—0.53	2.38	0.00	T.	2	18	8	4
1913	44.1	+9.1	78	10	1.18	—0.33	3.49	0.20	0.4	6	11	7	12
1914	41.0	+6.0	80	— 4	0.22	—1.29	0.95	0.00	T.	2	19	6	5
1915	40.2	+5.2	83	— 5	1.94	+0.43	4.86	0.30	1.2	6	11	10	9
1916	37.3	+3.3	80	— 8	1.61	+0.10	3.65	0.05	3.6	5	16	6	8
1917	40.7	+5.7	77	3	0.28	—1.23	1.02	T.	1.4	3	14	6	10
1918	39.9	+4.9	76	0	2.11	+0.60	5.10	0.70	4.4	7	13	5	12
1919	33.6	—1.4	68	—12	3.40	+1.89	6.22	1.97	6.3	8	11	7	12
1920	35.4	+0.4	71	5	2.18	+0.67	4.45	0.73	1.2	8	10	5	15

T. indicates an amount too small to measure, or less than .005 inch rainfall, and less than .05 inch snowfall.

DECEMBER.

Mild winter weather prevailed during the greater part of December and the temperature was above normal continuously during the first 16 days. From the 17th to the 28th the only cold weather occurred, with the temperature below normal except on a few days. Cold waves, beginning on the 22d and 26th, spread over the entire State but there were no unusually low temperatures reported. The last three days were warm.

Conditions were generally favorable for out door work and stock. Until the cold weather set in very little frost was in the ground and plowing was reported from many places during the greater portion of the second week. During the cold weather winter grain was well protected by snow and the condition at the end of the month was good.

Rain or sleet fell in the south and east portion of the State on the 3d-4th. On the 13th the first well defined snowstorm reached from southwest to northeast across the State and extended to the Mississippi by the morning of the 14th. Amounts up to 7.0 inches occurred at stations in the central counties. The snowstorm of the 20th-22d covered the entire State except a small area in the east-central division. Considerably more than 10 inches fell in areas in the northern and west-central divisions. At Sioux City the 24-hour fall, 13.6 inches, is the greatest of record in December. This snow drifted badly and resulted in considerable delay to street car and automobile traffic. The snowstorm of the 25th-26th was confined to the eastern half of the State, and the amounts were generally light except over the southeastern district. After the ground became covered it remained so during the rest of the month over practically the entire State, but was becoming bare at the close of the month.

Thunderstorms, though unusual in December, occurred on the 3d, 4th and 13th at a large number of stations, particularly in the eastern portion of the State. At Dubuque thunderstorms occurred on the 3d and 13th. At this station thunderstorms have been recorded only three times in December during the last 46 years and never before have two occurred in one December.

An extensive glaze storm occurred in connection with the storm of the 20th-22d. It was preceded by a general snow cover, so no damage to winter grains and grass is believed to have resulted.

Pressure. The mean pressure (reduced to sea level) for the State was 29.97 inches. The highest recorded was 30.52 inches, at Omaha, Neb., on the 24th and the lowest was 29.00 inches, at Dubuque, (the lowest of record for December) on the 13th. The monthly range was 1.52 inches.

Temperature. The mean temperature for the State, as shown by the record of 99 stations, was 26.4°, or 2.5° higher than the normal. By divisions, three tiers of counties to the division, the mean temperatures were as follows: Northern, 23.6°, or 2.4° higher than the normal; Central, 26.7°, or 2.6° higher than the normal; Southern, 29.0°, or 2.5° higher than the normal. The highest monthly mean was 32.8°, at Keokuk, and the lowest was 20.8° at Inwood. The highest temperature recorded was 65°, at Burlington, on the 3d, and the lowest was -26°, at Inwood, on the 24th. The temperature range for the State was 91°.

Humidity. The average relative humidity for the State at 7 a. m. was 85 per cent, and at 7 p. m. it was 77 per cent. The mean for the month was 81 per cent, which is practically normal. The highest monthly mean was 90 per cent at Charles City, and the lowest mean was 74 per cent, at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 104 stations, was 1.16 inches, or 0.06 inch less than the normal. By divisions, the averages were as follows: Northern, 1.11 inches, or 0.04 inch greater than the normal; Central, 1.17 inches, or 0.08 inch less than the normal; Southern, 1.19 inches, or 0.16 inch less than the normal. The greatest amount, 2.64 inches, occurred at Knoxville and Olin, and the least, 0.26 inch at Denison. The greatest amount in any 24 consecutive hours was 1.40 inches, at Knoxville, on the 13th.

Snow. The average snowfall for the State was 7.4 inches, or 1.2 inches greater than the normal. The greatest amount, 19.3 inches, occurred at Northwood, and the least, 2.0 inches, at Afton, Cumberland and Denison.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau Station was at the rate of 55 miles an hour, from the west, at Sioux City, on the 15th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 41, or 7 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau Stations was as follows: Charles City, 25; Davenport, 39; Des Moines, 53; Dubuque, 29; Keokuk, 45; Sioux City, 42; Omaha, Neb., 56.

Miscellaneous Phenomena. Aurora: 16th. Fog: 1st, 2d, 3d, 4th, 5th, 6th, 9th, 10th, 12th, 13th, 21st, 22d, 26th, 29th, 30th, 31st. Hail: 13th, 21st. Halos, lunar and solar: 13th, 14th, 16th, 19th, 20th, 22d, 23d, 24th, 25th, 26th, 27th, 29th, 31st. Parhelia: 16th, 23d. Parselenae: 23d. Sleet: 4th, 9th, 13th, 21st, 22d, 25th. Thunderstorms: 3d, 4th, 13th.

Rivers. Moderate stages prevailed on all rivers with only slight fluctuations and were generally free of ice until the third week. The interior rivers froze from the 18th to 20th and the Mississippi and Missouri Rivers about a week later.

COMPARATIVE DATA FOR THE STATE—DECEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	29.1	+5.2	72	—18	0.45	—0.77	1.40	0.00	------	3	17	7	7
1891	32.3	+8.4	72	—14	2.41	+1.19	4.50	1.21	------	6	14	9	8
1892	18.9	—5.0	68	—29	1.65	+0.43	3.04	0.20	10.9	8	9	8	14
1893	22.0	—1.9	70	—21	1.31	+0.09	2.80	0.46	7.6	7	10	9	12
1894	30.1	+6.2	73	—17	0.95	—0.27	1.75	0.25	1.3	3	15	6	10
1895	25.4	+1.5	63	—16	1.63	+0.41	5.74	0.00	4.1	5	11	9	11
1896	30.8	+6.9	70	—10	0.65	—0.57	1.79	T.	1.6	4	10	8	13
1897	18.0	—5.9	60	—25	1.65	+0.43	3.22	0.61	15.9	6	11	7	13
1898	18.1	—5.8	60	—25	0.48	—0.74	1.70	T.	3.9	3	15	8	8
1899	22.6	—1.3	75	—19	1.61	+0.39	4.28	0.10	4.3	5	12	9	10
1900	26.9	+3.0	63	—10	0.45	—0.77	2.70	T.	2.4	4	13	6	12
1901	20.5	—3.4	64	—31	0.93	—0.29	2.75	0.05	5.4	6	10	9	12
1902	20.1	—3.8	59	—20	2.23	+1.01	5.51	0.67	12.9	8	9	6	16
1903	19.6	—4.3	58	—27	0.41	—0.81	1.96	T.	3.7	4	11	9	11
1904	23.4	—0.5	67	—19	1.44	+0.22	3.68	0.06	12.3	5	12	7	12
1905	27.0	+3.1	62	—11	0.52	—0.70	1.69	T.	4.2	3	19	6	6
1906	25.7	+1.8	65	— 9	1.43	+0.21	2.81	0.37	1.4	6	11	7	13
1907	28.8	+4.9	62	— 9	1.00	—0.22	2.28	0.05	4.7	5	10	7	14
1908	27.2	+3.3	67	—17	0.57	—0.65	2.07	0.05	3.8	3	15	8	8
1909	15.1	—8.8	60	—26	2.18	+0.96	6.10	0.89	13.7	11	10	5	16
1910	23.4	—0.5	57	—14	0.37	—0.85	1.39	0.01	3.0	3	15	7	9
1911	27.9	+4.0	60	—24	2.57	+1.35	4.43	0.62	12.6	7	13	6	12
1912	29.2	+5.3	64	—13	0.74	—0.48	1.75	0.10	1.1	3	18	7	6
1913	32.0	+8.1	65	—13	1.02	—0.20	4.73	0.00	1.3	4	15	5	11
1914	15.7	—8.2	63	—31	1.30	+0.08	2.24	0.57	11.1	9	10	6	15
1915	25.0	+1.1	56	—10	0.69	—0.53	1.70	T.	4.6	5	11	8	12
1916	18.7	—5.2	67	—25	1.04	—0.18	2.00	0.35	6.7	6	15	8	8
1917	14.5	—9.4	62	—40	0.56	—0.66	1.70	0.14	6.7	6	10	9	12
1918	32.7	+8.8	68	— 7	1.30	+0.08	3.30	0.37	5.1	8	9	8	14
1919	15.0	—8.9	52	—36	0.54	—0.68	1.55	0.08	5.8	4	11	7	13
1920	26.4	+2.5	65	—26	1.16	—0.06	2.64	0.26	7.4	5	10	8	13

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .05 inch snowfall.

MONTHLY STATE DATA FOR 1920.

Month	Barometric Pressure, Inches (Sea level).					Temperature Degrees, F.				Relative humidity, per cent					Precipitation, Inches.					Number of Days				Sunshin		Wind.		
	Mean	Highest	Date	Lowest	Date	Mean	Departure from normal	Highest	Lowest	7 a. m.*	12 noon§	7 p. m.*	Departure from normal¶	Lowest	Average	Departure from normal	Greatest	Least	Snowfall	With .01 inch o. more precip.	Clear	Partly cloudy	Cloudy	Per cent of the possible amount	Departure from normal	Average hourly velocity	Departure from normal	Prevailing direction
January	30.29	30.87	24	29.63	16	16.7	—1.2	58	—26	86	73	77	0	29	0.42	—0.63	1.05	T.	4.6	4	12	8	11	47	— 3	8.5	—0.2	NW.
February	30.15	30.74	3	29.48	17	24.0	+3.5	59	—22	85	72	76	+1	35	0.56	—0.59	1.75	0.04	4.1	5	9	6	14	39	—17	8.4	—0.9	NW.
March	29.87	30.60	6	29.85	15	38.0	+4.7	80	—21	79	60	65	—2	17	3.02	+1.25	5.70	0.47	2.4	7	15	7	9	60	+ 2	11.6	+1.7	SW.
April	29.85	30.28	24	29.17	1	42.4	—6.3	78	22	80	61	61	+4	26	4.59	+1.73	7.13	1.93	2.0	12	8	9	13	45	—15	10.0	—0.1	NW.
May	30.04	30.50	14	29.56	18	59.4	—1.1	89	29	75	54	55	—3	23	3.26	—1.31	5.78	0.62	0.0	8	14	9	8	60	— 2	7.8	—0.9	SE.
June	29.95	30.33	3	29.46	15	70.7	+1.6	99	40	75	53	55	—5	30	3.56	—0.82	8.48	1.25	0.0	9	16	10	4	69	0	7.9	+0.3	SW.
July	30.00	30.32	26	29.64	6	72.3	—1.8	102	45	78	54	55	—2	27	4.22	+0.26	7.49	1.11	0.0	9	19	9	3	73	— 1	6.2	—0.5	SW.
August	30.02	30.37	23	29.66	29	69.3	—2.5	98	39	81	52	58	—2	27	3.35	—0.33	8.52	0.44	0.0	7	18	8	5	69	— 2	5.2	—1.2	SE.
September	29.98	30.43	29	29.38	23	66.5	+3.1	98	24	83	54	61	—2	19	3.30	—0.06	7.21	0.69	0.0	8	17	8	5	68	+ 5	6.9	—0.3	S.
October	30.04	30.54	5	29.54	13	57.7	+6.9	90	11	81	53	60	—2	22	2.13	—0.33	4.64	0.48	T.	6	19	6	6	65	+ 3	7.0	—1.1	S.
November	30.16	30.82	12	29.54	21	35.4	+0.4	71	5	84	69	73	+2	29	2.18	+0.67	4.45	0.73	1.2	8	10	5	15	37	—17	7.7	—0.5	NW.
December	29.97	30.52	24	29.00	13	26.4	+2.5	65	—26	85	75	77	0	34	1.16	—0.06	2.64	0.26	7.4	5	10	8	13	41	— 7	9.0	+0.9	NW.
Means and	30.03		Jan.		Dec.	48.2	+0.8			81	61	64	—1		31.75	—0.22			21.7	88	167	93	106	56	— 5	8.0	—0.2	NW.
extremes		30.87	24	29.00	13			102	—26					17			8.52	T.										
Normals and	30.02		Jan†		Feb‡	47.4				81		66			31.97				30.7	85	166	101	98	61		8.2		NW.
records		31.09	1905	28.69	1902			113	—47					5			19.88	0.00										

†25th. ‡28th. §Local mean time. *Normal central time. ¶7 a. m. and 7 p. m. observations only.

COMPARATIVE DATA FOR THE STATE—Annual.

Temperature					Precipitation in Inches				
Year	Mean annual	Highest	Date	Lowest	Date	Annual	Greatest annual	Least annual	Av. snowfall
1890	48.0	110	July 13	—27	January 22	31.30	45.74	16.00	------
1891	47.3	106	August 9	—31	February 4	32.90	49.05	23.48	------
1892	46.6	104	July 11	—38	January 19	36.58	48.77	24.78	34.2
1893	45.7	102	July* 13	—36	January 14	27.59	33.27	19.19	37.2
1894	49.7	109	July 26	—37	January 25	21.94	29.81	15.65	19.2
1895	47.2	104	May 28	—33	February 1	26.77	35.25	18.57	26.0
1896	48.6	104	July 3	—20	January 4	37.23	51.60	28.68	22.6
1897	47.8	106	July* 23	—30	January 25	26.98	36.18	20.21	38.8
1898	47.7	103	August 20	—25	December 31	31.34	55.47	19.51	40.3
1899	47.3	104	September 6	—40	February 11	28.68	42.06	21.79	23.4
1900	49.3	103	August 3	—27	February 15	35.05	47.33	25.05	25.8
1901	49.0	113	July 22	—31	December 15	24.41	37.69	16.35	38.5
1902	47.7	98	July 30	—31	January 27	43.82	58.80	20.14	28.0
1903	47.2	101	August 24	—27	December 13	35.39	50.53	26.41	19.4
1904	46.3	100	July 17	—32	January 27	28.51	38.93	19.34	29.2
1905	47.2	104	August 11	—41	February* 2	36.56	52.26	24.66	38.3
1906	48.4	102	July 21	—32	February 10	31.60	44.34	20.63	32.8
1907	47.4	102	July 5	—31	February 5	31.61	43.90	19.93	24.0
1908	49.5	101	August 3	—18	January 29	35.26	49.98	24.11	22.7
1909	47.4	103	August* 15	—26	February* 15	40.01	53.48	27.20	49.0
1910	48.6	108	July 16	—35	January 7	19.87	27.99	12.11	23.4
1911	49.5	111	July* 3	—35	January 3	31.37	46.77	19.74	35.3
1912	46.4	104	September 8	—47	January 12	28.89	33.13	15.25	39.5
1913	49.7	108	July* 16	—25	January 8	29.95	45.18	20.31	25.4
1914	49.1	109	July 12	—31	December 26	31.93	44.11	23.30	27.5
1915	47.8	99	May 14	—32	January 28	39.53	51.15	27.29	31.3
1916	47.2	106	August 4	—34	January 13	28.90	46.34	22.48	29.5
1917	44.8	106	July 30	—40	December 29	27.81	36.00	20.78	32.4
1918	49.2	113	August 4	—36	February 4	32.78	47.53	25.03	33.4
1919	48.6	104	July 30, 31	—36	December 10	36.76	48.16	26.88	26.6
1920	48.2	102	July 23	—26	Jan. 4-Dec. 24	31.75	44.00	20.95	21.7

*And other dates.

DATES OF KILLING FROSTS, 1920.

STATIONS	Killing Frosts	
	Last in Spring	First in Autumn
Northern Division—		
Algona	May 14	Sept. 29
Allison	May 14	Oct. 1
Alta	May 10	Sept. 30
Alton	May 14	Sept. 30
Belmond	May 14	Sept. 30†
Britt	May 13	Oct. 1
Charles City	Apr. 14	Oct. 1
Decorah	May 14†	Sept. 30
Elkader		Sept. 30
Estherville	May 14†	Sept. 30
Fayette	May 14	Sept. 30†
Forest City	Apr. 28†	Oct. 1
Humboldt	Apr. 28†	Sept. 30†
Inwood	Apr. 28†	Sept. 30
Le Mars	Apr. 29†	Sept. 30
Mason City	May 14†	Sept. 30†
Milford (near)	Apr. 28†	Sept. 30
New Hampton	Apr. 28†	Sept. 30
Nora Springs	Apr. 17	Oct. 1
Northwood	May 14†	Oct. 1
Pocahontas	May 14†	Sept. 30
Postville	May 14	Sept. 30
Rock Rapids	May 14	Sept. 30
Sanborn	May 3†	Sept. 30
Sioux Center	Apr. 28†	Sept. 30
Spencer	Apr. 28†	Sept. 30
Storm Lake	Apr. 28†	Sept. 30
Washta	May 14†	Sept. 30
Waverly	May 14†	Sept. 30
West Bend	Apr. 28†	Sept. 30

STATIONS	Killing Frosts	
	Last in Spring	First in Autumn
Central Division—		
Ames	Apr. 28	Sept. 30†
Audubon	Apr. 28†	Sept. 30
Baxter	Apr. 28†	Sept. 30
Belle Plaine	Apr. 14†	Sept. 30
Boone	Apr. 28	Sept. 30
Carroll	Apr. 28	Sept. 30
Cedar Rapids	Apr. 14†	Oct. 29
Clinton	Apr. 14†	
Davenport	Apr. 13	Oct. 29
Delaware	Apr. 18†	Oct. 1†
Denison	Apr. 28†	Sept. 29
Des Moines	Apr. 28	Oct. 1
Dubuque	Apr. 14	Oct. 29
Fort Dodge	Apr. 28†	
Grinnell	Apr. 28†	Oct. 1†
Grundy Center	Apr. 28†	Oct. 1†
Guthrie Center	May 14†	Sept. 30
Harlan	Apr. 28†	Sept. 30
Independence	Apr. 28†	Sept. 30†
Iowa City	May 14†	Oct. 1
Iowa Falls	Apr. 28†	Sept. 30†
Jefferson	Apr. 28	Sept. 30
Little Sioux	Apr. 28†	Sept. 30
Logan	Apr. 28†	Sept. 30
Maquoketa	May 14†	Oct. 2
Marshalltown	Apr. 14†	Sept. 30†
Monroe	Apr. 28†	Sept. 30
Olin	May 14†	Oct. 1
Onawa	Apr. 28†	Sept. 30
Perry	Apr. 28†	Sept. 30
Rockwell City	Apr. 28†	
Sac City	Apr. 28†	Sept. 30
Sioux City	Apr. 28	Sept. 30
Tipton	Apr. 17†	Oct. 1
Toledo	May 14†	Sept. 30†
Waterloo	May 14†	Sept. 30
Waukee	Apr. 28	Sept. 30
Webster City	Apr. 28†	Sept. 30
Whitten		
Williamsburg	Apr. 17†	Oct. 1

STATIONS	Killing Frosts	
	Last in Spring	First in Autumn
Southern Division—		
Afton	May 14†	Sept. 30
Albia	May 14†	Sept. 30
Atlantic	May 14†	Sept. 30
Bedford	Apr. 28†	Sept. 30
Bloomfield	Apr. 17†	Oct. 1
Bonaparte	Apr. 17†	Oct. 29
Burlington	Apr. 14†	Oct. 29
Centerville	Apr. 15†	Oct. 1
Chariton	Apr. 28†	Sept. 30†
Clarinda	Apr. 28†	Sept. 30
Columbus Junction	Apr. 14	Oct. 29
Corning	Apr. 28†	Sept. 30
Corydon	Apr. 28†	Oct. 1
Creston	Apr. 28†	Sept. 30
Cumberland		Sept. 30
Earlham	May 14†	Sept. 30
Fairfield	May 14†	Oct. 1
Glenwood	Apr. 28†	Sept. 30
Greenfield	Apr. 27	Sept. 30
Indianola	Apr. 24†	
Keokuk	Apr. 13†	Oct. 29
Keosauqua	May 14†	Oct. 1
Knoxville	May 14	Oct. 1
Lacona		Oct. 1
Lamoni	Apr. 28†	Sept. 30
Lenox	Apr. 28†	Sept. 30
Mt. Ayr	Apr. 28†	Sept. 30
Mt. Pleasant	Apr. 17†	Sept. 30
Murray	Apr. 28†	Sept. 30†
Oakland	Apr. 28†	Sept. 30
Oskaloosa	Apr. 28†	Sept. 30
Ottumwa	Apr. 14†	Oct. 1
Pella	Apr. 15	Oct. 1
Sigourney	Apr. 17†	Oct. 1
Stockport	May 14†	Oct. 1
Thurman	Apr. 28†	Sept. 30
Washington	Apr. 17†	Oct. 1
Winterset	Apr. 28	Sept. 30
Omaha, Neb.	Apr. 13	Oct. 28

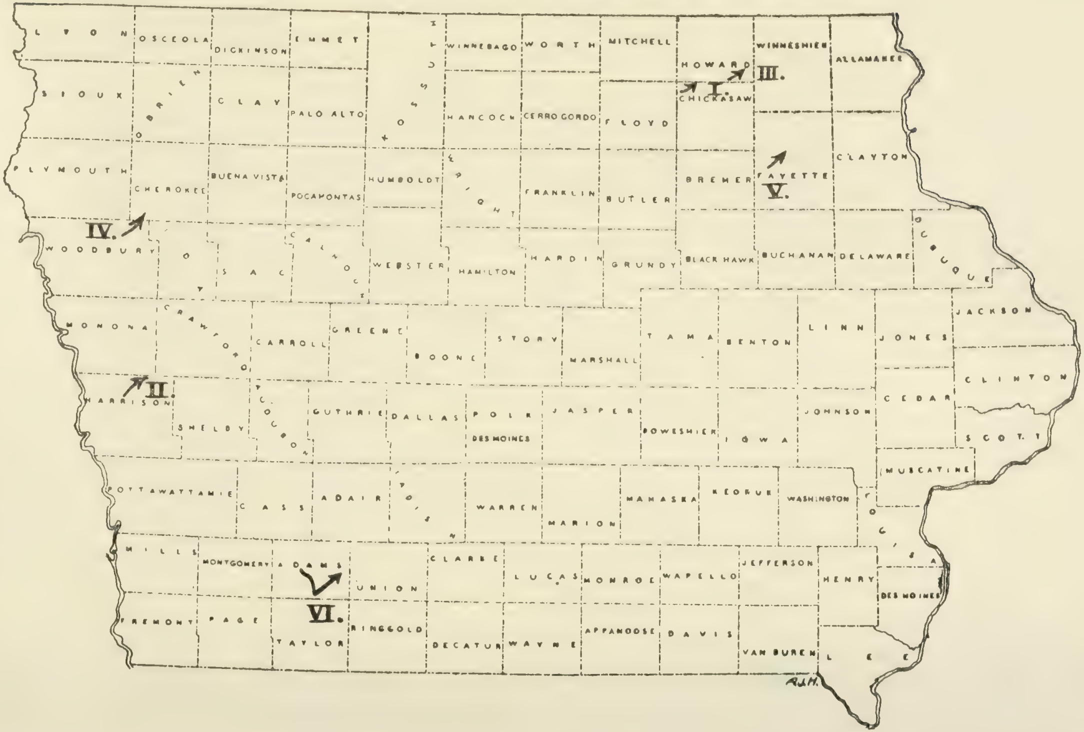
†Date of last temperature of 32° or lower in the spring, or first temperature of 32° or lower in the autumn (as the case may be) when frost was not reported.

TORNADOES IN IOWA DURING THE YEAR 1920.

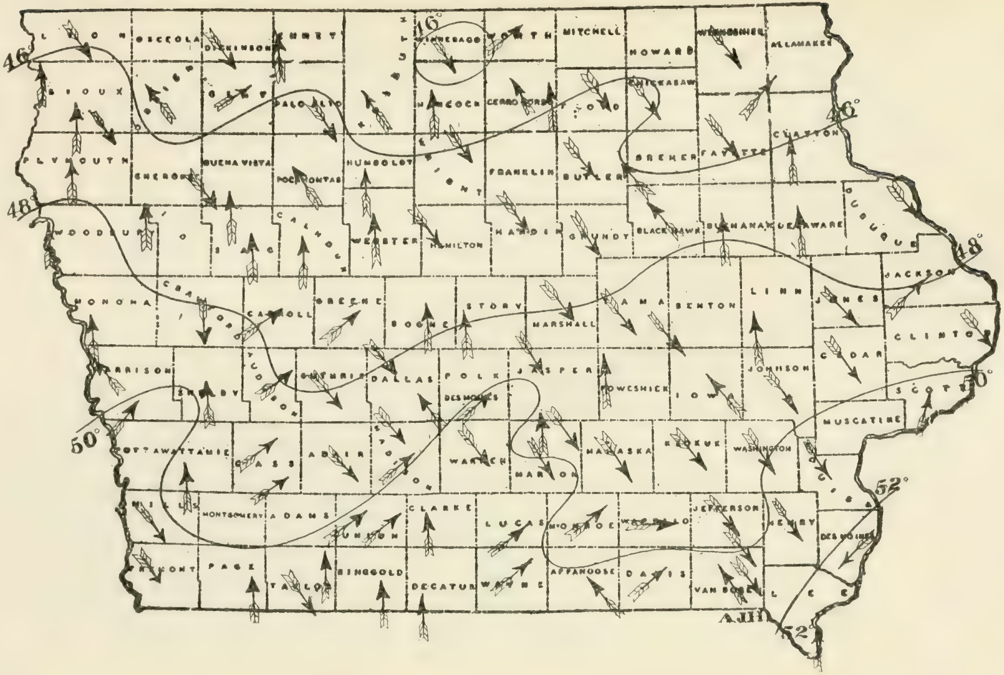
Storm No.	Nearest towns	Date	Hours	Storms moved from	Length of path, miles	Persons killed	Persons injured	Estimated damage
I	Alta Vista to Jerico	May 8	5:00 p. m.	S. W. to N. E.	4	0	0	$ 10,000
II	Dunlap	May 22	5:30 p. m.	S. W. and W.	6	0	1	7,000
III	New Oregon	May 22	5:30 to 6:00 p. m.	S. W. to N. E.	5	0	0	6,000
IV	Correctionville to Pierson	June 8	11 to 11:30 p. m.	S. W. to N. E.	5	0	0	60,000
V	Westgate	June 9	2 to 2:30 a. m.	S. W. to N. E.	Short	0	0	8,000
VI	Corning to Lenox	July 1	5:45 to 6:10 p. m.	N. W. to S. E. to N. E.	20	0	4	100,000
				Totals	34	0	5	$ 191,000

TORNADO PATHS IN IOWA DURING THE YEAR, 1920.

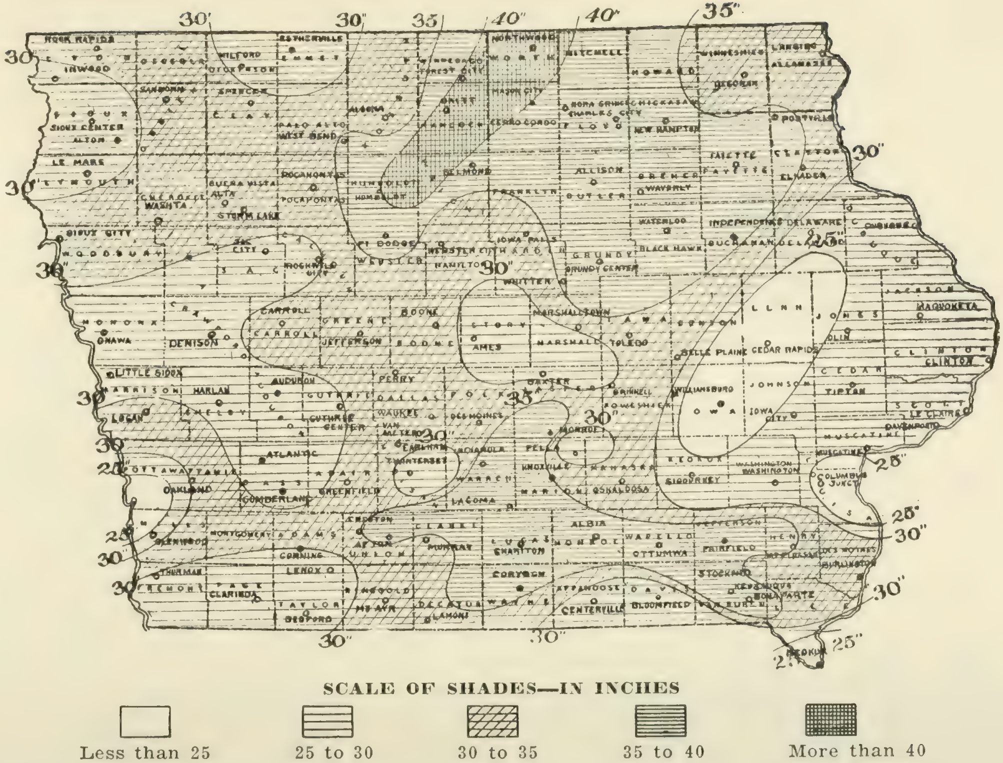
(Numerals Refer to Descriptive Data in Accompanying Table.)


I.
II.
III.
IV.
V.
VI.
LYON
OSCEOLA
DICKINSON
EMMET
KOSSUTH
WINNEBAGO
WORTH
MITCHELL
HOWARD
WINNESHIEK
ALLAMAKEE
SIOUX
O'BRIEN
CLAY
PALO ALTO
HANCOCK
CERRO GORDO
FLOYD
CHICKASAW
PLYMOUTH
CHEROKEE
BUENA VISTA
POCAHONTAS
HUMBOLDT
WRIGHT
FRANKLIN
BUTLER
BREMER
FAYETTE
CLAYTON
WOODBURY
IDA
SAC
CALHOUN
WEBSTER
HAMILTON
HARDIN
GRUNDY
BLACK HAWK
BUCHANAN
DELAWARE
DUBUQUE
MONONA
CRAWFORD
CARROLL
GREENE
BOONE
STORY
MARSHALL
TAMA
BENTON
LINN
JONES
JACKSON
HARRISON
SHELBY
AUDUBON
GUTHRIE
DALLAS
POLK
DES MOINES
JASPER
POWESHIEK
IOWA
JOHNSON
CEDAR
CLINTON
SCOTT
MUSCATINE
POTTAWATTAMIE
CASS
ADAIR
MADISON
WARREN
MARION
MAHASKA
KEOKUK
WASHINGTON
LOUISA
MILLS
MONTGOMERY
ADAMS
UNION
CLARKE
LUCAS
MONROE
WAPELLO
JEFFERSON
HENRY
DES MOINES
FREMONT
PAGE
TAYLOR
RINGGOLD
DECATUR
WAYNE
APPANOOSE
DAVIS
VAN BUREN
LEE
R.J.H.

MEAN ISOTHERMS AND PREVAILING WINDS, YEAR 1920.


46°
46°
46°
48°
48°
50°
50°
52°
52°
LYON
OSCEOLA
DICKINSON
EMMET
WINNEBAGO
WORTH
MITCHELL
HOWARD
WINNESHIEK
ALLAMAKEE
SIOUX
CLAY
PALO ALTO
HANCOCK
CERRO GORDO
FLOYD
CHICKASAW
FAYETTE
CLAYTON
PLYMOUTH
CHEROKEE
BUENA VISTA
POCAHONTAS
HUMBOLDT
FRANKLIN
BUTLER
BREMER
WOODBURY
CALHOUN
WEBSTER
HAMILTON
HARDIN
GRUNDY
BLACK HAWK
BUCHANAN
DELAWARE
DUBUQUE
JACKSON
MONONA
CRAWFORD
CARROLL
GREENE
BOONE
STORY
MARSHALL
BENTON
LINN
JONES
CLINTON
HARRISON
SHELBY
AUDUBON
GUTHRIE
DALLAS
POLK
DES MOINES
JASPER
POWESHIEK
IOWA
JOHNSON
CEDAR
SCOTT
MUSCATINE
POTTAWATTAMIE
CASS
ADAIR
WARREN
MARION
MAHASKA
KEOKUK
WASHINGTON
MILLS
MONTGOMERY
ADAMS
UNION
CLARKE
LUCAS
MONROE
WAPELLO
JEFFERSON
HENRY
DES MOINES
FREMONT
PAGE
TAYLOR
RINGGOLD
DECATUR
WAYNE
APPANOOSE
DAVIS
VAN BUREN
LEE
AJH

TOTAL PRECIPITATION, YEAR 1920.


30"
35
40"
35"
25"
28"
SCALE OF SHADES—IN INCHES
Less than 25
25 to 30
30 to 35
35 to 40
More than 40

WEATHER AND CROP REVIEW.

All reference in this publication to the effect of weather on crops, is the result of cooperation between the United States Weather Bureau and the Iowa Weather and Crop Service.

Winter set in early and severely, preceding the crop season of 1920. For the three winter months the average precipitation was the least of record, but that of the early winter fell mostly as snow, giving ample protection to winter grains and grasses during the rigorous, record breaking temperatures of early December. Under the snow covering, the ground froze very little, though cold weather was practically continuous till after the middle of February. There were considerable periods without snow covering in the south central and southeast districts and extending a few counties northward along the Mississippi and Missouri Rivers. About 6 per cent of the winter wheat was winter killed, which is less than the average.

March was wet, warm and windy. The snow cover disappeared in the northern portion about the middle of the second week, having been continuous there since November. By the end of the third week frost had left the ground. Several wind storms seriously damaged farm buildings. The ground was too wet for much field work.

April was cold and wet with a snow storm in the southern third of the State on the 3d-4th. It was too cold for plant growth and too wet for field work. However, a larger oats acreage than last year was sown in the larger producing counties of the west and northwest portions of the State. In the wetter, later, southern districts, oats seeding was prolonged unusually till as late as the middle of May. The development of fruit buds was beneficially delayed by the cold weather.

The season continued cool till about May 20, when a warm spell set in that brought vegetation forward rapidly. Field work progressed slowly, particularly in the south central and southeast districts, where much corn was yet to be planted at the close of May. The most advanced section was the upper Raccoon River watershed where corn planting began about May 4 and was finished before the close of the month. In Union and portions of adjacent counties not more than one-third of the corn had been planted up to June 1. Fruit bloomed generally about the middle of May, with conditions favorable for pollination. Peaches in the southern tier of counties showed more bloom than for the past seven years. Young live stock suffered greatly from the cold, wet, cloudy spring.

June was warmer and drier than usual in most sections of the State. The week ending June 15, with a mean temperature of 80 degrees was the warmest week of the entire season and the warmest June week since June 3-9, 1911. The humidity, however, averaged 20 per cent lower than during a similar hot period last year, with the result that diseases of small grains were much less prevalent, though causing considerable damage to spring wheat in the west central and northern counties. The following week averaged 15 degrees cooler and was very beneficial for small grains, which were in or approaching the critical heading and blooming period. All crops improved during June but were still below normal development on July 1. More than half of the July rainfall occurred during the first week. Temperatures though generally below normal were high enough, in connection with the heavy rains of the first week, to cause rapid development of diseases of spring wheat which for the second year in succession was almost a failure in the western and northern counties. Hail storms were unusually prevalent the first half of July. The greatest damage, approximately $100,000, occurred in Scott County on the 9th.

Harvest and haying weather was generally favorable. Though oats got a bad start and looked unpromising till late in June, they made a remarkable showing at harvest and thrashing time. The yield was above normal and the quality good. At the close of August, 91 per cent of the small grain had been thrashed, which is 20 per cent more than normal and the largest in the last 10 years. Winter wheat yield was good though slightly less than the 10-year average. Spring wheat was disappointing.

From July 14 to September 8, temperatures were almost continuously below normal. As a result, corn became more and more backward, so that by September 7, the bulk of the crop had only reached the hard dough stage and was considered to be three weeks late. Reports from hundreds of correspondents on September 1, indicated that with normal weather only 42 per cent of the corn would be safe from frost by September 20. But the unexpected happened in that abnormally warm and dry weather, September 9-27, forced the corn to mature rapidly, so that when killing frosts came from September 29 to October 1, they did not damage more than 10 per cent of the crop and this was easily absorbed by feeding on the farms. Killing frost did not visit the southeastern counties till October 29. The corn crop of 1920 is the largest ever produced in Iowa and the quality is very good. Warm and generally dry weather in October dried the corn so that husking made good progress during the last half of the month, except in the north central counties where locally heavy rains and warm weather made cribbing in large quantities unsafe. At the close of November, corn husking was 77 per cent finished. "Hogging down" corn averages 7 per cent this year as compared with 8 per cent last year.

The cool summer was very beneficial for potatoes. The yield per acre averaged 110 bushels, which has been exceeded but twice in thirty years and the total crop is more than twice that of last year on less acreage. It is rather rare that a bumper crop of corn and a bumper crop of potatoes are raised in the same year.

Fruit, truck crops, sugar beets, pop corn and sweet corn were all good crops.

Soil conditions were generally favorable for seeding winter wheat during September and in some counties the acreage was increased over that harvested this year. Growth continued till checked by the abnormally cold weather of November 9-17. Of the acreage seeded, 90 per cent made good growth and became well established; 8 per cent germinated but made little showing above ground; and only 2 per cent did not germinate up to the beginning of winter. Fall plowing made good progress till checked by dry weather in October.

Bulletin No. 1, April 13, 1920—

Winter set in early and severely toward the close of November, 1919. The first three weeks of December were colder than any other similar period of record. On December 10, local areas in Hardin, Grundy, Poweshiek, Dallas and Fremont counties experienced temperatures of 30 degrees below zero or lower, the lowest being -36 degrees at Thurman. Preceding and during this cold weather the ground was generally snow-covered and but slightly frozen. Later in the winter deficient precipitation and snow cover in the southeast and south-central districts exposed winter wheat, rye, clover and grasses to severe temperatures and considerable damage is believed to have occurred. Strawberries also suffered. Other fruits are believed to have wintered well, except peaches which were injured by the severe cold of early winter. Live stock generally wintered well, feed being abundant in most sections.

During March young clover suffered considerably from heaving due to alternate freezing and thawing, but winter wheat and rye improved, due to general rains and warmer weather toward the close of the month. Excessive precipitation in the south-central and southeast districts delayed farm work so that the spring wheat acreage will be much reduced and the oats acreage will be less than intended, though, probably greater than last year. Corn will absorb most of the decreased acreage of spring and winter wheat.

Seeding was quite general on March 31, but cold and stormy weather following, stopped all field work and the ground has remained frozen ever since in the northern districts. Snow banks still remain in the southern tier of counties from the heavy snows of April 3d and 6th.

Considerable seeding of oats and wheat has been done the past week in the central and northwest portions of the state. About half of the oats seeding is finished in these sections. The rain and snow Sunday and Monday and low temperature Monday night are causing further delay. The season is 7 to 10 days later than last year. The southern counties are even later than this, as a result of the excess of precipitation in March, the snowstorms of April 3d and 6th, and the cold weather so far in April.

Bulletin No. 2, April 20, 1920—

Showers were mostly light and scattered till Saturday night, though moderately heavy rains occurred Thursday night in the Mississippi River counties from Lee to Clinton. Rains were general Saturday night to Monday morning, the heaviest exceeding 2 inches in Calhoun, Sac, Carroll, Greene and northern Audubon and Guthrie counties.

Farm work has been greatly delayed by the saturated soil and deficient sunshine and temperature. During the more favorable weather Friday and Saturday, seeding of oats and spring wheat was pushed rapidly in the central, north-central and northeast counties. Most of the oats have been "mudded" in, but there is a firm determination to maintain or increase the acreage of oats regardless of weather conditions. Oats seeding is nearing completion in the drier counties. Oats are sprouting slowly. Early seeded oats were injured by freezing early in the month and some reseeding has been necessary.

A large acreage is being seeded to grass and more would be, were it not for the fabulously and unprecedentedly high price of medium red clover seed.

Early spring wheat is beginning to show green on the south slopes in Plymouth county which normally is one of the largest spring wheat producing counties. Though very late, some spring wheat seeding was done as far south as Adair, Scott and Polk counties this week.

More damage to winter wheat resulted from the severe freeze of April 4 and the cold days following than was apparent last week. However, the recent rains and slightly higher temperatures have caused some improvement.

Plowing for corn is well under way, especially sod.

An increased acreage of sugar beets for manufacture is probable in the sugar beet district of north-central Iowa if weather conditions permit preparation for seeding. Onion and potato planting began in Mitchell county where these crops are specialties, on the 15th. The extreme scarcity and high price of good seed potatoes and the poor crop realized last year will considerably reduce the acreage devoted to potatoes for the State as a whole. Some planting has been reported in nearly all sections.

Gardens are generally late. Apple buds are believed to have survived the recent inclement weather, but considerable damage to other fruits has probably occurred.

Spring pigs, lambs, calves, chickens and colts have not thrived during the cold wet weather that has prevailed so far in April. The spring pig crop is not as large as usual. There is considerable complaint of small litters.

Grass is starting slowly and winter feed, especially roughage, is becoming scarce in some sections.

Bulletin No. 3, April 27, 1920—

Cool, cloudy, wet weather continued, the sunshine, being about half of the normal. The largest excess in precipitation was in the western half of the State where the total rainfall was above 1.00 inch at many stations. Tuesday and Wednesday were warm, the rest of the week was cold with occasional freezing temperatures, except in the southeast portion. The season is from 10 to 20 days late, but the weather map this morning (27th) indicates increased sunshine and warmth.

Seldom has the oats crop shown such a range of progress, varying from green fields to further acreage to be seeded if the weather permits. Seeded after this date the crop will be in grave danger from hot weather at a critical stage. Soil conditions have been bad and the seed poorly covered. There are many reports of the seed rotting. Many farmers will reluctantly plant some acreage to corn that they intended for oats. Spring wheat is starting very slowly, many fields not showing green and some seed has rotted. Winter wheat though progressing slowly is in fair condition and will improve with the warmer weather and sunshine now in prospect. The same is true of alalfa, clover, grasses and pastures.

Considerable loss of spring pigs, lambs and chicks is reported, due to the lack of sunshine and warmth.

Plowing for corn and sugar beets is in progress but the amount accomplished is considerably less than usual for the time of year.

Potatoes that have been in the ground four weeks are not up yet. Considerable planting was done in the northern counties. In Mitchell county not to exceed 15 per cent of the crop has been planted, and about 20 per cent of the onions. Truck and gardens are unusually late. Fruit buds have been beneficially retarded by the cloudy, cold weather and are believed to be in fair condition generally. Peaches and plums are in bloom in the extreme southern counties.

Bulletin No. 4, May 4, 1920—

The week opened cold with heavy to killing frosts and minimum temperatures of 32 degrees or lower, the lowest being 26° at Inwood. Sunshine was below normal, except in the east-central district. Rainfall was above normal in the northwest portion, with frequent showers elsewhere. The month of April was the coldest since 1907 and with that exception the coldest in more than 40 years. The week closed warmer.

Field work has been almost at a standstill due to wet soil and frequent showers. Plowing for corn is probably not one-fourth done and no planting has been done. The soil has been so wet that where plowing has been done it will become cloddy if dry weather comes soon. Toward the close of the week the soil dried more rapidly and worked up better. With normal weather conditions planting of corn and sugar beets will begin within a week.

Oats and barley seeding has progressed slowly. Considerable more barley will be seeded, but it is becoming too late for much further oats seeding. Reports of oats rotting are numerous. Early seeded fields are up and showing green, but the stand is thin and patchy.

Spring wheat is up and doing nicely, but slow. Winter wheat is making fair progress.

Gardening has scarcely begun. Potatoes in the ground more than a month are just beginning to come up. The high price and poor quality of potato seed and the backward season will considerably reduce the potato acreage.

Fruit is believed to have benefited from the lateness of the season. Only in the extreme southern counties are plums, cherries and strawberries in bloom, though in the central portion of the State, buds are just ready to burst into bloom at the first warm, sunshiny period of two or three days. Fruit was probably unharmed by the severe frosts of April 27th and 28th. The first spray is being applied in the central districts.

Losses of young live stock have continued as a result of the cold, damp, dark weather.

Bulletin No. 5, May 11, 1920—

Farm work made rapid progress during the past week under the most favorable weather conditions of the season. Showers were light and scattered till the night of the 10th, when heavy rains fell in the northeast and north-central portions. The soil was dried rapidly by the increased sunshine and decidedly warmer weather toward the close of the week. Ground that had been plowed too wet became cloddy.

Corn planting is furthest advanced in Palo Alto, Pocahontas, Calhoun, Webster and Humboldt counties, where it began about the 4th, and now amounts to 20 to 50 per cent of the acreage. That planted on the 4th and 5th has sprouted. Planting is most backward in portions of Union, Clarke, Madison and Warren counties, where it has scarcely begun.

Early oats are 2 to 3 inches high. Though remarkably late, a considerable acreage was seeded to oats in the southern and northern districts during the week. In the central counties seeding was generally completed the preceding week.

The first planting of sugar beets is over in Kossuth county and about 30 per cent of the sugar beet acreage has been planted in Wright county, with fair conditions of soil and weather. Onions are all planted in Mitchell county, where the acreage is slightly larger than in any former year. Some cabbage has been planted. There was considerable potato planting this week, but the acreage will be smaller than last year. Gardening made rapid progress.

Pastures are sufficiently advanced in many sections so that stock has been turned in, affording much relief from the scarcity and high price of feed and diverting labor from the care of live stock to urgent field work.

Winterkilling of winter wheat amounted to about 6 per cent of the acreage seeded last fall, as shown by the May 1st report of the Iowa Cooperative Crop Reporting Service. The condition of the surviving winter wheat at that time was 85 per cent. This crop has made good progress during the warm weather of the last few days and hides the ground in Adair county. The condition of rye was 91 per cent; tame hay, 92; pastures, 85.

Fruit in general was in better condition by 7 per cent May 1st than it was a year ago, according to the secretary of the State Horticultural Society. "The condition of apples was 80; pears, 77; cherries, 83; Americana plums, 81; Domestica plums (few grown), 77; Japanese plums (few grown), 75; peaches (south half of state only), 44; grapes, 88; strawberries, 89; currants, 83; gooseberries, 88; black raspberries, 85; red raspberries, 80; and blackberries, 84 per cent of a full crop. It is feared by some that considerable damage was done to the fruit buds by the cold weather some months ago which, if so, would cause a heavy drop of buds later. However, it does not take a large amount of bloom to make a good crop, if a fair amount of the bloom sets fruit and proper spraying is done." Fruit prospects are more promising than for some time. Plums and cherries burst into full bloom this week in the central and southern districts and apples in the extreme south. The accompanying warm, sunshiny days should insure fertilization and a good set of fruit. Peaches in the south tier of counties show more bloom than for the past 7 years.

Bulletin No. 6, May 18, 1920—

Field work was again stopped by heavy to excessive rains of the 11th-12th and has not been generally resumed except in the northeast and north central districts and on the uplands in some other sections. Not more than 30 per cent of the corn has been planted as compared with 40 per cent on the 15th last year. However, about 80 per cent has been planted in Pocahontas county. There are some reports of corn rotting in the cold, wet seed bed. Practically no corn is up yet. Much plowing remains to be done, and in the south-central district on many farms not a furrow has been turned.

Sunshine averaged but 35 per cent of the possible amount, or about half of the normal; rainfall averaged 2.0 inches, or about twice the normal; and the temperature averaged 52°, or 8° below the normal. White frost was general on the morning of the 14th and in the northern districts on the 12th, but serious damage is not believed to have resulted. The lowest temperature reported was 31° at Decorah, Iowa City and Stockport. A return to seasonable weather is indicated by the weather map this morning (18th).

Apples, plums, cherries, pears and strawberries are in bloom in the central districts, but buds are just beginning to open in the northern counties. The second spraying will take place soon in the central districts.

Grass, small grains, truck crops and gardens are making slow progress. Potatoes that have been planted six weeks are just showing the rows.

Bulletin No. 7, May 25, 1920—

Corn planting and preparation therefor made good progress, except where interrupted by heavy rains in the northeast one-fourth of the State and by wet soil in the southern counties. For the State as a whole approximately 70 per cent of the corn has been planted. In Carroll, Buena Vista, Pocahontas and some territory in adjacent counties from 90 to more than 95 per cent of the corn has been planted and the first planted is 2 inches high. Increased warmth and sunshine benefited all vegetation. In nearly all sections of the State there is complaint that early planted corn has rotted and replanting is in progress, but the area is probably not as great as that usually devastated by cut worms which up to this time have been reported in only one county, Audubon, and only in limited numbers there. Considerable plowing remains to be done in most sections.

Winter wheat has improved rapidly, is stooling nicely and is 8 to 12 inches high in the southern half of the State. Oats are catching up rapidly and the prospect is now good. Spring wheat is improving and in fair condition; rye very good, and beginning to joint.

Strawberries and other small fruits promise well, except that there was considerable winter killing of blackberries in Fayette county. Tree fruit prospects are unusually good. The second spray is being applied in the central and southern districts.

Truck crops and gardens made good progress, though all are unusually backward. The later planting of commercial sugar beets has been delayed beyond the usual time.

Pastures and meadows made good progress due to the increased warmth and sunshine. The condition of live stock, especially young pigs, improved appreciably. Local downpours of rain in northern Benton and northwestern Linn counties on Saturday, 22d, drowned several hundred head of live stock and washed out crops, railways, concrete bridges, and highways.

Bulletin No. 8, June 1, 1920—

Corn planting made unusually rapid progress, there being no weather delay except in the northwest and southwest districts where showers occurred. In the extreme northwest counties heavy rains fell Wednesday, causing considerable damage to corn fields by erosion and flooding. Planting is completed in many central and northwest counties, nearing completion in the north-central and northeast districts and averages 75 to 90 per cent completed in the southern districts. In Union and portions of adjacent counties not more than one-third of the corn has been planted. Early planted corn where soil and weather conditions were favorable has received the first cultivation, but much of the early planted seed rotted in the ground and replanting is being done. Cut worms have made their appearance in considerable numbers in the west central counties. In the southern counties where the season has been unusually backward, a considerable acreage that was originally intended for oats, but later would have been planted to corn if the weather and soil had been favorable, will now be planted to sorghum, millet, soudan grass and other late crops.

Abundant sunshine and temperature above normal have been favorable for all plant growth, but vegetation still averages 10 days later than normal. Showers would be beneficial in the central and eastern counties to dissolve the clods resulting from early, wet plowing, and to soften the crust that has formed in some localities.

Winter wheat made good progress. It is stooling generally, but not up to normal development for this date. Spring wheat and oats show steady improvement, but are considerably below normal. Pastures and hay have made good progress. Alfalfa will be ready to cut in about a week in the southern counties.

Small fruit prospects continue very good. The petal drop spray was applied to apples in the northern counties during the week. More spraying is being done than heretofore. Apple prospects are good. Peaches will yield a small crop this year for the first time in several years. Cherries promise a good crop.

The second planting of commercial sugar beets is about finished. Late potatoes were planted during the week, but the potato acreage in general will be reduced. An increased acreage of commercial tomatoes is indicated. Commercial cabbage will be set in large quantities this week. There is some complaint of onion maggots in Mitchell county.

Sheep shearing made rapid progress, and is completed in some counties. Livestock has improved considerably with the improved condition of pastures.

Bulletin No. 9, June 8, 1920—

Though too cool for the best growth of corn, the crop made good progress. In the more advanced sections most of it has been cultivated once and cross cultivation has begun. In the more backward southern counties

10 to 15 per cent is yet to be planted and there is some plowing to be done on the lower bottoms. Cut worms, wire worms and bill bugs have damaged corn, but probably not as much as usual for the State as a whole. Dry soil is preventing germination of corn in southern Benton and portions of Linn counties and hard, baked and cloddy soil is interfering with cultivation in sections that were too wet earlier in the season. Fields are generally clean of weeds. In many sections of the State showers would be beneficial, but in the Coon River Valley and south to the south line and east through the southern two tiers of counties the rains of the week have been heavy to excessive; also at Washta in Cherokee county.

Winter wheat has made good progress and is heading in the sections having the largest acreage. Oats have improved, but the color is bad on account of bad soil conditions in the southern counties.

The first crop of alfalfa has been cut in some counties and will soon be cut in all portions of the State. The crop is good. Clover is in bloom in the south half of the State. It with other hay promises well except in a few dry localities. Pastures have made excellent growth, but in the west-central counties are generally under stocked.

Apples have been seriously attacked by canker worm in localities but the crop in general promises well where sprayed. The small fruit crop will be good. Strawberries are ripe in the south and beginning to ripen in the northern districts.

The weather has been favorable for planting and cultivation of sugar beets, though too cool for best growth and the plants are small. The acreage has been greatly increased. Potatoes, truck and gardens are slow.

The secretary of the State Horticultural Society reports the condition of fruit on June 1 as follows: "Apples 85; Americana plums 78; cherries 81; pears 69; strawberries 90; grapes 85; red raspberries 82; black raspberries 87: blackberries 83; gooseberries 80; currants 82; peaches, (few grown) 40; Domestica plums, (few grown) 69; Japanese plums, (few grown) 62 per cent. The average for all fruit is 76 per cent, which is 14 per cent higher than the condition reported one year ago and 3 per cent lower than the May 1, 1920, report. At the present time it would seem that Iowa will have the best crop of fruit she had at any time."

Bulletin No. 10, June 15, 1920—

Hot, dry weather, with abundant sunshine prevailed, except scattered showers, mostly light, though excessive rain fell in Lyon county accompanied by damaging hail and wind on the 11th. Maximum temperatures of 90° or higher occurred on nearly every day and many stations had 95° or higher on the 13th. The mean temperature, 80°, is 12° above normal, 3° above the corresponding week last year, and the warmest June week since June 3-9, 1911.

Corn made rapid progress but varies from the just breaking through the ground, to some more than a foot high. There is yet about 5 per cent of the acreage to be planted in some southern counties. The earliest corn has been cultivated twice. Fields are mostly clean of weeds except where there is a shortage of labor.

Winter wheat is generally in head and is entering upon the most critical period—the filling period. Spring wheat is beginning to head and oats are jointing, though both are short. Oats are showing much red discoloration of the leaves, but otherwise small grain diseases are not as prevalent as at this date last year, due probably to the dry weather. The humidity of the past week has been about 20 per cent less than during the corresponding week last year.

Small fruits are badly needing rain, especially strawberries which are ripening in the south half of the State. Cherries are beginning to turn in the central counties. Grapes are in full bloom and are quite promising. Apples are dropping badly where not properly sprayed.

Gardens and truck crops need rain, but are making good progress. There is some complaint of a thin stand of onions in Mitchell county. About 75 per cent of the commercial cabbage has been planted and the acreage has been considerably increased. Late and replanted sugar beets are awaiting rain to germinate the seed.

Alfalfa is being cut generally and is a fair crop. Red and white clover is in bloom except in the northern counties. The hay crop is being reduced a certain amount by each day the hot, dry weather continues. Pastures are holding their own well in spite of the unfavorable weather.

Reports tabulated by the Iowa Weather and Crop Service show that on May 15, 36 per cent of the intended corn acreage of the State has been planted as compared with 40 per cent on that date last year and that on June 1, 91 per cent had been planted as compared with 95 per cent last year. The percentage condition of the crop on June 1 was 88 as compared with 95 per cent last year and a ten-year average of 92. The condition of potatoes was 90 as compared with 97 last year. Reports to the Iowa Co-operative Crop Reporting Service June 1 show the condition of oats as 92; spring wheat, 88; winter wheat, 83; barley, 92; rye, 90; all hay, 93; pastures, 93; alfalfa, 90; all of which are below the average of the last 10 years. The condition of winter wheat is the lowest since 1903.

Telegraphic reports Tuesday morning show good showers over the northern part of the State.

Bulletin No. 11, June 22, 1920—

Much cooler weather beginning Wednesday, 16th, was beneficial for small grains which were in or approaching the critical heading and blooming period. Reports are somewhat conflicting as to the effect of the hot weather of the preceding week on small grains, but in general no serious damage occurred. Spring wheat and oats are in fair to good condition and heading generally, but short. Winter wheat is blooming and filling and promises nearly an average condition generally. All small grains need rain badly in the southern and to some extent in the central districts, where in many places the ground is baked hard and large cracks have appeared.

Corn cultivation was pushed rapidly, except where delayed by rain in some northern localities. The earliest is knee high and has been cultivated three times, while the second cultivation is far advanced except in the backward southern districts. Fields are generally clean of weeds and grass in spite of the shortage of farm labor. A light touch of frost, but no damage, was reported from lowlands in some north-central and northeast counties on the night of the 17th. The nights were generally too cool for the best growth of corn.

Clover harvest is beginning but the crop was considerably reduced by the recent hot, dry weather in the south and central districts. Other hay is reduced by the same causes, except alfalfa, most of which has been cut the first time and yields well. The weather has been ideal in most sections for harvesting alfalfa and clover, and the crop, so far, has been put up in splendid condition.

Strawberry picking is about over in the southern counties where the crop was somewhat reduced by heat and drouth. Early cherries are on the market except in the northern districts. All fruits need rain, except in the northern counties.

Bulletin No. 12, June 29, 1920—

Cool weather continued till Saturday, 26th, when it turned much warmer. Hot, strong, southerly winds Sunday and Monday, caused the corn leaves to roll and wilted garden truck in the central district and east and south where precipitation has been generally deficient for the past few weeks. Good rains Monday night, 28th, over most of the drouthy area will be of great benefit to all crops. The rain came too late for the hay and strawberry crops, but will improve the later small fruits, cherries and truck. Early potatoes are in bloom as far north as the central district.

Corn has made very good progress and now averages nearly up to normal development for this date. The earliest is reported waist high, or too high to cultivate, in Blackhawk and Jasper counties and the latest is just showing through the ground where three plantings were necessary due to cut worm damage in some west-central and southwest counties, and very short where wet soil delayed planting in the south-central district. Considerable corn is being "laid by."

Small grain benefited greatly by the cool period 16th-25th. Winter wheat has headed and filled well, is beginning to turn in color in the south half of the State and promises a good yield. Spring wheat has improved somewhat but is heading on short straw, shows a very uneven stand, poor color and the yield will be below the average. Oats also headed short and the yield will be only fair.

Clover harvest is in progress and good yields are reported except in the drouthy area. Haying will become general after the Fourth of July and a good crop is indicated in the north and most of the west portion of the State.

Pastures are in good condition, more as a result of under stocking than of favorable weather. All indications point to a diminished live stock production, especially pigs.

Bulletin No. 13, July 6, 1920—

Corn has made wonderful progress, due to rainfall and temperature both being above normal. Much has been laid by; considerable is growing so rapidly that by the time the present rainy period is over it will be too large to cultivate and lay by in the usual manner; and there are scattered reports of tasseling. In Hardin county the prospect is the best in 25 years. As a whole the crop is up to normal for this date, though unusually variable in stage of development over the State. The south three sections are still backward, but catching up rapidly.

Winter wheat harvest will soon become general. Cutting began in Mahaska county on Saturday, 3d. A good yield is now indicated. Spring wheat is turning color in places, but is unusually variable in development and stand, and in general promises a yield below the average. Oats are headed on short straw and the earliest are beginning to ripen. The yield will be considerably below the average. Barley is turning and will be ready to cut in a week.

Haying has been delayed by rains, though considerable clover has been cut. The yield is below the average. The second crop of alfalfa is making excellent progress.

Severe windstorms occurred in many sections of the State on the afternoon and night of July 1, accompanied in some cases by hail. The worst wind was in Lee, Adams and Union counties. In Adams county there was a well defined tornado that caused complete destruction over a limited area. The windstorm flattened the small grain so that it can be cut only one way, broke off considerable corn, blew off much tree fruit and broke down large numbers of trees of all kinds.

A large crop of late cherries is being harvested. Blackberries and raspberries are being harvested and good yields are reported. Truck crops have shown great improvement during the past week.

The secretary of the State Horticultural Society reports the condition of the fruits on July 1, as follows:

"Summer apples, 54; fall apples, 67; winter apples, 55; Americana plums, 67; cherries, (final crop), 82; pears, 58; strawberries, (final crop), 70; grapes, 85; red raspberries, 76; black raspberries, 86; blackberries, 74; gooseberries, (final crop), 84; currants, (final crop), 80; peaches, 30; Domestica plums, 61; Japanese plums, 53 per cent. The average for all fruits is 68 per cent which is 21 per cent higher than the condition report of one year ago, and 8 per cent lower than the June 1, 1920 report."

Bulletin No. 14, July 13, 1920—

Abundant rains and moderate temperatures have been generally favorable for crops, though haying has been delayed and some clover damaged by the rains.

Corn has made excellent progress, in spite of the cool weather. It is farther advanced than usual in the central and northern districts and averages not more than a week later than normal in the backward southern districts, where it is catching up rapidly. Tassels are showing all over the State and most of the crop is laid by with the fields generally clean of weeds and in good condition. The soil is abundantly stored with moisture. Corn could now stand considerable drouth and yet mature a good crop if future sunshine and temperatures are favorable. It is yet too early to say that the corn crop is assured.

Winter wheat harvest is in full progress northward to the central counties when the weather will permit. The cool weather has favored the filling of the heads and good yields and quality are indicated. Early oats harvest is well along in the southern counties and beginning as far north as Polk county. Though the straw is short and the stand thin and patchy, early harvest reports indicate that this crop will be better than expected, the recent cool, moist weather having filled the heads. Late oats have likewise been benefited and are now quite promising. Barley is turning and will soon be ready to cut.

Diseases of small grains which have been conspicuous by their absence this season, became noticeable this week, but too late in the season to cause serious damage. Black stem rust is reported in Woodbury and some other counties and closed smut in the central Mississippi counties.

Hail storms were unusually prevalent particularly on the 7th, but also on the 8th and 9th. Large damage to crops occurred in Clayton, Dallas, Davis, Mahaska, Polk, Scott and Winneshiek counties and lesser damage in Buena Vista, Clinton, Fayette, Harrison, Marion, Pottawattamie and Union. The damage will probably total more than a half million dollars. That in Scott county alone approximates $100,000, mostly covered by insurance.

Late potatoes were greatly improved by the cool rainy weather of the week. Early potatoes are being used in the south half of the State though the quality and yield are not satisfactory.

Reports to the Co-operative Crop Reporting Service showed the following percentage condition of crops on July 1: Corn, 90; oats, 83; spring wheat, 85; winter wheat, 86; barley, 88; rye, 90; flax, 90; potatoes, 90; hay, 88; pastures, 96; alfalfa, 94 per cent. All crops were below the 10-year average except hay and pastures. The high condition of pastures is accounted for by the decrease in the numbers of live stock. Corn acreage is about 2 per cent greater than last year and approximates 10,200,000 acres.

Bulletin No. 15, July 20, 1920—

Rainfall averaged nearly normal, though excessive downpours occurred in Monroe and Wayne counties. Some overflow occurred along the lower Des Moines River, but the damage to crops is relatively small. The soil is well filled with moisture and no place in the State is suffering from a deficiency. Temperatures so far in July have averaged low for the time of year, but warm enough in connection with frequent showers to cause considerable increase in the diseases of small grain in the west-central and northwest portions of the State.

Spring wheat, in particular, is affected by black stem rust, red rust and blight, and 'the yield and quality will be fair to poor in those portions of the State and not very good elsewhere. Winter wheat harvest is far advanced and threshing begun northward to Warren county. Good yields and excellent quality are indicated.

Early oats are headed on short straw and the heads are small, but the quality is generally good. Early oats harvest is practically completed in the south and well advanced in the north portions of the State. Late oats have improved generally with the moist and relatively cool weather, though attacked by red rust in the western counties. The straw is longer and the heads larger and better filled than the early oats. They are now ready for harvest in the southern counties.

Barley harvest is in progress and the yield will be good.

Corn shows steady improvement and now averages slightly above normal. The late corn in the southern counties is catching up rapidly and can scarcely be distinguished from the earlier corn. Tasseling will be general in all portions of the State during the coming week. Silks have already appeared in the earlier fields. The color of the plants is a luxuriant dark green. Prospects for a corn crop are now good.

Haying and harvest have been somewhat hindered by the rains. Timothy and clover are light crops except in the northern counties where rainfall was abundant and temperatures lower during the critical June period. Second crop alfalfa harvest is beginning in the southwest counties and good yields are again reported.

Truck crops have improved. New potatoes of unusual size and abundance are on the market in the northern counties, though somewhat disappointing in the south. At Des Moines the retail price is $1.35 per peck. Commercial tomatoes give promise of an early and abundant crop.

Bulletin No. 16, July 27, 1920—

Showers were mostly light and scattered, except that moderate to heavy rains were general in the Raccoon valley Tuesday night the 20th-21st. Soil moisture is generally sufficient though rain is needed in a few localities in Lyon, Dubuque and Scott counties. Hot weather prevailed the first of the week but turned cool toward the close. Maximum temperatures of 100 degrees or higher occurred at a few stations in the western portion of the State.

Crop prospects in general are very good. Corn over two-thirds of the State is above the normal condition. Tasseling is general, ears are shooting and silks appearing. It is entering the critical, pollination stage with moderate temperatures and ample soil moisture in most sections. A good, general rain in the next few days would be beneficial.

Early oats and winter wheat are all harvested and late oats and barley harvest well advanced. Considerable winter wheat has been thrashed in the southern half of the State which is the largest producing section. The yields so far run from 20 to 45 bushels per acre, testing 61 to 62 pounds per bushel, grading No. 2 or higher and selling for $2.50 to $2.53 per bushel. No thrashing returns have been received from spring wheat, but the yield will undoubtedly be light and the quality poor, especially in the western and northern portions of the State where scab, smut, rust, blight and other diseases have been nearly as prevalent as last year. The yield and quality of oats are better than expected, being about the average of the last 10 years.

Haying made excellent progress and much of the crop was cured without rain. Considerable timothy was cut for seed, but the yield of seed is probably below the average in the principal producing areas. First crop clover cut for seed in Henry county is yielding up to three bushels per acre. Second crop alfalfa harvest is in progress and good yields are again reported.

Truck crops and gardens are good in nearly all portions of the State though early potatoes are not very good in the southern portion. In the large potato producing counties of the north-central portion of the State new potatoes are so good and plentiful that they are being sold at reduced prices, while at Des Moines and Marshalltown the retail price is $4.00 per bushel and further south the price is still higher. All truck crops would be benefited by rain.

Bulletin No. 17, August 3, 1920—

Cool nights with dry weather in most of the state, were unfavorable for the best development of corn. The drouth is most marked in the extreme northwest, east-central and Mississippi River counties, where on thin soils corn is curling and firing, but would fully recover if rain comes soon. Though the surface is dry, considerable moisture remains in the subsoil. Corn and other deeply rooted crops are therefore not as a rule suffering seriously.

Harvesting, haying and thrashing progressed rapidly during the dry weather of the past two weeks. Only occasional fields of late oats, barley or spring wheat in the northern tier of counties remain unharvested. The yield of winter wheat has been satisfactory. Thrashing returns from oats, mostly in the southern half of the state where the crop in its early stages was thought to be the poorest, show yields averaging slightly above 40 bushels per acre, or about 3 bushels per acre above the state-wide 10-year average. In most of the northern part of the state the crop is reported as turning out better than expected. Reports on spring wheat, especially in the northern and western portions of the state, continue poor. The quality of small grains other than spring wheat is good to excellent. This is partly due to the excellent harvest weather. Thrashing is progressing rapidly and less than the usual amount of stacking will be done.

Truck crops, pastures and meadows in the drier areas are seriously needing rain. The rains of early July in most sections of the state gave newly seeded clover and grasses an excellent start. Some new clover fields in the central part of the state have made such rank growth that a crop of hay yet this season or much good pasturage is possible, if further rains are timely.

Bulletin No. 18, August 10, 1920—

Rains of the week were local and mostly insufficient. From Emmet county southeast to Blackhawk and in portions of Dallis, Polk, Decatur, Scott and Winneshiek counties the rains were copious and will insure a corn crop so far as moisture is concerned. In the western districts the extreme southeast counties and a few other small areas the drouth continues.

Corn has fired and curled badly on uplands and thin soils in many portions of the State, yet most of the crop has not suffered beyond recovery. Roasting ears are reported in the earlier fields, but the cool weather for a long period prior to this week has had its effect and the crop as a whole is at least a week later than normal for this date. Unless temperatures are somewhat above normal during the next month there will be considerable soft corn.

Shock thrashing made good progress. Yields of oats, winter wheat, barley and rye continue satisfactory and the quality is good, but spring wheat is generally poor in yield and quality. Coal shortage has interfered with thrashing in some localities and therefore caused more stacking than was intended. Car shortage has retarded shipment and the elevators are filled to capacity.

Fall plowing has started where soil moisture is sufficient. There is less complaint of shortage of farm labor than for several years. Unsettled conditions of finance and transportation are causing cattle feeders to hesitate in embarking upon their usual programs.

Late potatoes and truck crops have suffered considerably from drouth. Sugar beets for manufacture in the north central counties have been favored with sufficient moisture, but the fields are weedy and prospects are not the best.

The Iowa Co-operative Crop Reporting Service gives the conditions of the principal crops on August 1st as follows: Corn, 94 per cent, indicating a total production of 412,284,000 bushels; winter wheat average yield per acre, 20 bushels; total crop, 8,620,000 bushels; spring wheat condition, 70 per cent,

Truck crops and gardens are good in nearly all portions of the State indicating a yield of slightly above 13 bushels per acre and a total production of 5,480,000 bushels; oats yielding nearly 38 bushels per acre and a total crop of 208,010,000 bushels; potatoes, condition 90 per cent, indicating about double last year's crop.

The secretary of the State Horticultural Society reports the condition of fruit on August 1st as follows: Summer apples, 59 per cent; fall apples, 64; winter apples, 60; Americana plums, 65; pears, 63; grapes, 85; red raspberries, 74; black raspberries, 73; blackberries, 63; peaches, 35; Domestica plums, 55; Japanese plums, 50 per cent.

Bulletin No. 19, August 17, 1920—

Deficient temperature, sunshine and rainfall were unfavorable for growing crops this week. Scattered localities had good rains from the 10th to 13th, but most of the area of the State had light showers or none.

Corn made slow progress. The bulk of the crop for the State as a whole is only in the roasting ear stage and so far even the earliest has not been reported as beginning to dent. Unusually favorable weather is necessary during the next month to avert frost damage. A good yield is indicated, but with normal weather from now on and normally early frost a considerable per cent of the ears will be soft. The cool, cloudy weather arrested the firing and curling, especially where accompanied by showers.

Shock thrashing is practically completed in many southern counties. This week a number of correspondents report less stacking than usual. Much of the small grain is being held on the farm because of the unsatisfactory prices to the farmer and the poor transportation facilities. Yields of oats and barley in the northern counties are generally normal or above, quality good, thrashing nearly half completed.

Pastures in many localities are becoming short as a result of the dry weather. A slight movement of feeder cattle into the State is noted this week.

Truck crops and potatoes are generally suffering for rain. Commercial tomatoes are being harvested in Mahaska county with good yields in prospect. The first field of commercial onions harvested in Mitchell county yielded 550 bushels per acre. Late fruit prospects continue very good.

Bulletin No. 20, August 24, 1920—

Rains of the 19th-21st covered most of the State, ranging from none at a few stations in the southeast, to excessive from Mills, Montgomery and Adams counties northeastward over Carroll, Greene, Humboldt and Worth counties. At Humboldt, 5.93 inches fell and at Carroll, 5.72. The week opened warm but turned much cooler during and after the rains. Temperatures low in the forties prevailed on Sunday morning, 22d, the lowest reported being 41, at Washta, Cherokee county. Light frost was reported in the Big Sioux bottom on the morning of the 21st and on the lowlands in Franklin and Marion counties on the morning of the 22d.

Corn will be benefited by the rain where not injured beyond recovery on the thinner soils and uplands by the preceding drouth. There is the possibility, however, that the added moisture will start new growth and delay maturity if cool weather continues. From many sections the stalks are reported to be of unusual height. Only the earliest has begun to dent, while the latest is still in the milk. A warm month is imperatively needed to place the bulk of the crop out of danger from frost. Wind on the 20th blew down considerable corn in Adair, Audubon and Polk counties.

Thrashing was considerably delayed by the rains, particularly in the north where nearly half of the shock thrashing remains to be done. In the north central counties shocked grain was damaged by the excessive rains.

Plowing has started vigorously where the soil has been made sufficiently moist. In the southeast and part of the south-central district the ground is too hard to plow. In the southwest and west-central districts the moisture makes possible the preparation of a good seed bed for winter wheat and it is probable that more than the normal acreage will be seeded in those sections.

Pastures, late potatoes, sweet corn, and late truck crops were greatly benefited by the rains. Onion harvest in Mitchell county made good progress. The yield will average about 500 bushels per acre. Cabbage is also being harvested. Early grapes are ripening; early plums are being harvested; and winter apples in sprayed orchards promise a good crop.

Bulletin No. 21, August 31, 1920.

Another cool week with deficient rainfall has been unfavorable for crops.

Corn has remained practically at a standstill. Reports of denting have been received from only a few localities, mostly in the northern half of the State. The bulk of the crop is yet in the roasting ear stage and much is yet in the milk. The damage referred to in last week's bulletin as resulting from wind on the 20th has been extensively discussed with township crop reporters visiting the State Fair this week. It appears that for some unknown reason corn in nearly all portions of the State has not put out strong brace roots. Some correspondents state that the corn root worm has been working extensively and others that some sort of a rot or fungus has attacked the roots. The heavy rains of the 19th-21st over much of the western and northern portions of the State loosened the soil and weighted down the corn stalks which were unusually tall and heavy. As a rule the stalks lie in all directions in a tangled mass and not in one direction as is usual when blown down by wind. The damage was equally as great on new ground as on old. Approximately a half million acres have been damaged in this way and with the crop in its present backward condition the value will be reduced at least half over that area for it has little chance to recover. Moreover, it is believed that over much of the State the same poor rootage prevails and that heavy rains or moderately strong winds would produce the same result.

Shock thrashing is practically completed. Only stack thrashing remains to be done and this is but a relatively small portion of the crop.

Fall plowing made good progress during the week, particularly where moisture is sufficient. Considerable was done even in dry, hard soil by the use of tractors.

In anticipation of considerable soft corn this fall and because of the shortage of cars for transporting grain to market, there has been a considerable movement of feeder stock, mostly cattle and sheep, into the State recently. Pastures and new seedings of clover and timothy are in good condition except in the southeast portion of the State where the drouth continues generally.

Late apples have dropped badly where not sprayed, but in orchards that are well cared for, there is a fair crop of good quality. Grapes are abundant and of good quality.

Commercial truck crops are being harvested and marketed. The yield is good where rain has been sufficient. Late potatoes are suffering for rain in the south-central and southeast districts.

Bulletin No. 22, September 7, 1920—

For the fourth consecutive week temperatures have averaged below normal. Rain fell in all portions of the State during the week exceeding an inch over a belt extending from the south-central district northward over portions of the north-central and northeast districts. In some of the south-central counties nearly four inches occurred. Sunshine was deficient.

Corn has made slow progress. In the south-central and southeastern districts the rain aided the development of the late-planted corn, but early corn, which in some sections had begun to show signs of drying and maturing, was made green again. Denting is general in the earlier fields of the northern half of the State, yet the bulk of the crop is only in the hard dough stage and much late corn is still in the milk. A little will be ready for the silo in 10 days to two weeks. The prostrate and tangled condition of the crop in many west and north-central counties will make the use of corn binders nearly impossible.

Only abnormally warm and dry weather during the next 30 days can save the corn crop from serious frost damage. Reports received from nearly 500 township correspondents showed that with normal weather from September 1st to September 20th only 42 per cent of the crop would be safe from frost on that date, and to September 30th, 67 per cent. If frost holds off till October 15th, 87 per cent will be safe, and if it holds off till October 31st, 96 per cent will be safe. As the average date of killing frost is October 10th and another cool week has farther retarded the development since the above estimates were made by our correspondents, it now seems fairly certain that 30 to 40 per cent of this year's great and otherwise promising crop will be frosted and soft.

Pastures, potatoes, truck crops and new seedings of grasses and clover were greatly benefited by the rains. Commercial tomatoes and sweet corn are turning out well. Canning has been in full progress for more than two weeks.

Fall plowing and preparation for winter wheat seeding made good progress, except where delayed by frequent and heavy rains, or in some localities in the southeast portion of the State where the soil is too dry from lack of rain.

At the close of August, 91 per cent of the thrashing had been done, which is about 20 per cent more than normal and the greatest in the last 10 years.

The acreage of timothy cut for seed this year is about 250,000, and the yield is good, though exact figures are not yet available.

Bulletin No. 23, September 14, 1920—

Cool weather at the beginning of the week was followed by four days of warm, sunshiny weather that brought the mean temperature of the week up to 71 degrees, which is 4 degrees above normal and corresponds to the usual temperatures of the last week in August. Maximum temperatures around 90 were general on the 11th. Rainfall generally exceeded an inch, except in the east one-fourth of the State, where it was mostly light, and in some of the west-central and northwest counties, where there was none.

Corn was at about the stage of development usually expected on August 25th when the warm weather came and started it to advancing more rapidly. The bulk of the crop is now denting, but the heavy rains will have a tendency to prolong its vegetative activity and retard maturity. The earliest planted corn is being cut for silage in some localities, though much difficulty is being experienced in the use of corn-cutting machinery because of the tangled condition of the stalks in large areas and the wet soil. Early corn is now far enough advanced to gather for seed and without delay a supply of this corn should be selected and given proper care.

Commercial sweet corn is yielding better than usual and the quality is very good. Canneries are putting up a generous pack. The stage of development of the crop is indicated by the fact that at this time of the year factories are usually rejecting many hard ears, but this year practically no hard ears are found, while some are being rejected as too milky. Ear worms have thus far been less numerous than usual. A large pack of tomatoes is also reported.

Sugar beets have been greatly benefited by the rains, but they now need warm, dry, sunshiny weather to promote ripening. The cool, wet weather has been favorable for potatoes.

Winter wheat seeding is far advanced in Adair and Madison counties with about the normal acreage. The acreage in Warren county, which is the principal producing county, will be above normal. Fall plowing has made rapid progress and is finished in some localities.

The percentage condition of corn on September 1 was 90; potatoes, 90; flax, 90; and pastures, 89. A year ago the conditions were: Corn, 96; potatoes, 60; flax, 83; and pastures, 90. It is probable that the corn crop will rank third among the larger total productions in the State, but unfortunately a large per cent is almost certain to be caught by frost. The production of potatoes will be more than double that of last year.

The Secretary of the State Horticultural Society reports the condition of fruit on September 1 as follows: Fall apples, 68 per cent; winter apples, 61; Americana plums, 47; pears, 64; grapes, 82; peaches, 27; Domestica plums, 50; Japanese plums, 47.

Bulletin No. 24, September 21, 1920—

Corn advanced rapidly toward maturity as a result of the warm, dry and sunshiny weather with strong breezes that prevailed in most sections of the State during the past week. The average temperature, 72 degrees, is 9 degrees above normal and places it among the warmer weeks of the season. Temperatures around 90 on the afternoon of the 14th were followed by cooler in the middle of the week and warmer again at the close. Heavy to excessive rain fell in southeast Iowa on the 14th-15th and moderate showers in the northeast portion the night of the 19th.

Approximately half of the corn crop is now safe from frost. Silo filling and fodder cutting is general. Hogging down has begun in some localities. Every day of warm, dry, sunny weather adds greatly to the value of the crop.

Winter wheat seeding is being pushed rapidly and the earliest is up and showing green. The soil is becoming too dry to plow in many sections of the State.

Sugar beets have been greatly benefited by the recent weather. While the yield in tons per acre is not unusually large, the beets are ripening up rich and harvest will begin about October 1. The factories will start operation about October 4.

Sorghum has matured a good crop and the factories are busy manufacturing syrup.

The Mitchell county truck crops section is marketing a bountiful crop of potatoes, cabbage and onions. About 20 car loads per day are being shipped from the town of St. Ansgar alone and more would be shipped if cars were available.

Bulletin No. 25, September 28, 1920—

Abnormally high temperatures, abundant sunshine, generally light to moderate rainfall and strong southerly breezes have rushed the belated corn crop toward maturity. For the State as a whole 80 to 85 per cent of the crop is safe from frost, ranging from as little as 50 per cent in some south-central and southeast counties to practically all safe in some central and northeast counties. Silo filling and fodder cutting is completed in the earlier localities and is getting well under way where the crop is late. Much seed corn was saved during the week. In a few places early corn is dry enough to crib in limited quantities. Locally heavy rains and high winds blew down and tangled the corn and in some cases caused other destruction, particularly in Carroll, Sioux and Ringgold counties. The tangled condition of the corn in the western half of the State is proving to be a serious handicap in cutting for fodder and for silos. In some cases machines do not get more than half of it. In some sections the corn is so tall and heavy that it is difficult to handle.

Temperatures around 90 degrees prevailed on Saturday afternoon, the 25th, followed by much cooler Sunday night with minimum temperatures around 40 degrees. The mean temperature, 71 degrees, is 11 degrees above normal and is among the higher temperatures of record so late in the season.

Winter wheat seeding has made good progress, except in a few localities where the soil is too dry to prepare the seed bed. Hessian fly has appeared in troublesome numbers in Pottawattamie county and farmers are there waiting till about October 1 before beginning to sow wheat. Much of the crop is up and looking well.

Sweet corn canneries are drawing their operations to a close. The pack has been large and of excellent quality. Many yields of 6 to 7 tons of ears per acre are reported. The ear worm has become troublesome during the past week, but the cool, backward season seems to have checked its depredations considerably.

Apples are abundant but many were blown from the trees by winds or are falling as a result of disease or worms. In Warren county, and no doubt elsewhere, much of the crop is rotting on the ground for lack of a profitable market.

Bulletin No. 26, October 5, 1920—

All vegetative activity, except in the southeast portion of the State, was brought to a sudden halt by a decided change to colder weather. Light frost on the morning of September 29 in the north and west counties was followed by heavy frost on the 30th and general killing frosts and freezing temperatures on the morning of October 1. Reports from about 500 correspondents on October 1, show that 84 per cent of the corn was safe from frost damage. More than 90 per cent was safe in most northeast and east-central counties and some western counties, while in some south-central and southeast counties less than 70 per cent was safe. In the latter sections the frost was not severe enough to do much damage, and it is probable that for the State as a whole not more than 10 per cent of the crop will be soft. This will be easily absorbed by feeding on the farms. The abnormally warm and dry three weeks in September worked wonders in saving the crop. Cribbing of the earlier corn will start in about two weeks if the weather continues favorable. "Hogging down" has begun. Six cents per bushel is being offered for husking where the corn stands up well.

Winter wheat seeding continues where the soil is moist enough, but the later seeding lies ungerminated in the ground and needs rain. The earlier seeded wheat is looking green and fine.

Pastures have been cut short by the dry weather and live stock has been put on winter feed. Some fourth crop alfalfa is being cut. Where money is available for loans to stockmen, large numbers of feeding stock have been shipped in to consume the abundant forage, but in many sections money is not available for such loans and this very desirable agricultural enterprise is at a standstill.

About 60 per cent of the potatoes, cabbages and onions have been harvested and the yields are very good. Potatoes are selling in Crawford county for 60 cents per bushel and in Mitchell and Franklin counties for 75 cents; onions, $1.10 per cwt.; cabbage, $10 per ton.

CROP SEASON WEATHER, 1920, BY WEEKS.

Average rainfall, mean temperature and mean sunshine with departures from the normal, as derived from the records of 24 selected stations.

Week ending	Rainfall (inches)		Temperature (Deg. Fahr.)		Sunshine	
	State average	Departure	Mean	Departure	Per cent	Departure
April 6	0.7	+0.1	35	— 8	54	— 7
April 13	0.4	—0.3	40	— 7	64	+ 4
April 20	1.7	+1.0	46	— 4	40	—20
April 27	0.9	+0.1	50	— 3	31	—31
May 4	0.5	—0.4	50	— 5	54	— 5
May 11	0.3	—0.7	60	+ 2	63	— 1
May 18	2.0	+1.0	52	— 8	35	—31
May 25	0.8	—0.2	65	+ 3	72	+ 6
June 1	0.4	—0.6	68	+ 3	68	+ 3
June 8	0.9	—0.2	65	— 2	64	— 3
June 15	0.5	—0.5	80	+12	84	+15
June 22	0.7	—0.4	65	— 5	52	—17
June 29	1.0	0.0	74	+ 2	74	+ 4
July 6	2.2	+1.3	74	+ 1	69	— 2
July 13	0.8	—0.2	69	— 5	66	— 8
July 20	0.8	—0.1	72	— 3	76	+ 2
July 27	0.2	—0.6	75	0	78	+ 5
August 3	0.1	—0.7	72	— 3	89	+16
August 10	0.6	—0.2	75	+ 1	69	— 3
August 17	0.6	—0.2	71	— 2	59	—12
August 24	1.5	+0.7	68	— 3	61	— 8
August 31	0.5	—0.3	68	— 2	79	+12
September 7	1.0	—0.2	64	— 4	49	—16
September 14	1.1	+0.3	70	+ 4	63	— 1
September 21	0.2	—0.6	72	+ 9	87	+24
September 28	0.8	0.0	71	+11	72	+10
For season	21.2	—1.9	64.3	— 0.6	64	— 2

+ excess; — deficiency.

MONTHLY PERCENTAGE CONDITION OF CROPS, 1920, AND YIELD PER ACRE

Crops	Apr. 1	May 1	June 1	July 1	Aug. 1	Sep. 1	Oct. 1	Yield per acre
Corn			88	90	94	90	93	46.0 bu.
Oats			92	83	89			39.0 bu.
Spring wheat			88	85	70			11.3 bu.
Winter wheat	85	85	83	86				19.7 bu.
Barley			92	88	89			27.5 bu.
Rye	90	91	90	90				16.2 bu.
Flax				90	90	90	86	10.0 bu.
Potatoes			90	90	92	90	90	110.0 bu.
Tame hay		92	93	88	90			1.44 tons
Wild hay			93	88	90			1.27 tons
Alfalfa			95	94	98			2.84 tons
Pastures		85	93	96	94	89	90	

FINAL CROP REPORT OF THE STATE, 1920.

The following estimates of acreage, yield and value of the crops of the State, derived from the reports of hundreds of correspondents well distributed in each county, are the result of the joint effort of the U. S. Bureau of Crop Estimates, of which Mr. Frank S. Pinney is Agricultural Statistician, and the Iowa Weather and Crop Service. The table showing the total value of crops does not include or take into account live stock products.

Corn.—The estimated acreage was 10,300,000; average yield, 46.0 bushels per acre; total yield, 473,800,000 bushels; average price $.47 per bushel; total value, $222,686,000. Only 10 per cent of the crop was reported to be soft or immature and 77 per cent had been husked on December 1. The total production of corn in Iowa this year is the greatest of record. The quality is very good.

Oats.—The estimated area harvested was 5,893,600 acres; average yield, 39.0 bushels; total yield, 229,850,400 bushels; average price 36 cents; total value, $82,746,144.

Spring Wheat.—Area harvested, 400,000 acres; average yield, 11.3 bushels per acre; total yield, 4,520,000 bushels; price per bushel, $1.35; total value, $6,102,000.

Winter Wheat.—Area harvested, 431,000 acres; average yield, per acre, 19.7 bushels; total yield, 8,490,700 bushels; average price $1.41 per bushel; total value, $11,971,887.

Barley.—Area harvested, 284,000 acres; average yield per acre, 27.5 bushels; total yield, 7,810,000 bushels; average price, 63 cents per bushel; total value, $4,920,300.

Rye.—Area harvested, 80,000 acres; average yield, 16.2 bushels; total yield, 1,296,000 bushels; price per bushel, $1.17; total value, $1,516,320.

Flax Seed.—Average yield, 10.0 bushels; total yield, 120,000 bushels; total value at $1.80 per bushel, $216,000.

Timothy Seed.—Area harvested, 270,000 acres; average yield, 4.9 bushels; total yield, 1,323,000 bushels, total value at $3.00 per bushel, $3,969,000.

Clover Seed.—Area harvested, 134,000 acres; average yield 2.0 bushels; total value at $11.65 per bushel, $3,122,200.

Potatoes.—Area harvested, 104,500 acres; average yield, 110 bushels; total yield, 11,495,350 bushels; average price, $1.22; total value $14,024,327.

Hay (Tame).—Average yield, 1.44 tons per acre; total yield, 4,349,620 tons; average price, $16.24 per ton, total value, $70,637,829.

Hay (Wild).—Average yield, 1.27 tons; total yield, 647,700 tons; average price, $12.69; total value, $8,219,313.

Alfalfa.—Area harvested, 200,000 acres; average yield, 2.84 tons, total yield, 568,140 tons; average price, $19.23 per ton; total value, $10,925,332.

TABULATED CROP SUMMARY, 1920.

Crop	Acres	Average Yield	Average Price	Total Yield	Total Value
Corn	10,300,000	46.0 bu.	$ 0.47	473,800,000	$ 222,686,000
Oats	5,893,600	39.0 bu.	0.36	229,850,400	82,746,144
Spring wheat	400,000	11.3 bu.	1.35	4,520,000	6,102,000
Winter wheat	431,000	19.7 bu.	1.41	8,490,700	11,971,887
Barley	284,000	27.5 bu.	0.63	7,810,000	4,920,300
Rye	80,000	16.2 bu.	1.17	1,296,000	1,516,320
Flax seed	12,000	10.0 bu.	1.80	120,000	216,000
Timothy seed	270,000	4.9 bu.	3.00	1,323,000	3,969,000
Clover seed	134,000	2.0 bu.	11.65	268,000	3,122,200
Potatoes	104,500	110.0 bu.	1.22	11,495,350	14,024,327
Hay, tame excluding alfalfa	3,020,850	1.44 tons	16.24	4,349,620	70,637,829
Hay, wild	510,000	1.27 tons	12.69	647,700	8,219,313
Alfalfa	200,000	2.84 tons	19.23	568,140	10,925,332
Pasture and grazing	10,137,680		7.01		71,065,136
Ensilage, estimated					25,000,000
Sweet corn, subject to revision					1,960,000
Pop corn	30,000	30.0 bu.	3.23	900,000	2,907,000
Buckwheat	7,500	17.0 bu.	1.34	127,500	170,850
Fruit crop estimated					7,000,000
Garden truck, estimated					4,000,000
Sugar beets for manufacture	17,250	9.2 tons	11.34	158,750	1,801,000
Miscellaneous crops estimated					5,500,000

Total value, not including live stock products, for the year, 1920.....$560,460,638
Total value for the year, 1919.....$950,056,002

Frank S. Pinney, Agricultural Statistician,
U. S. Bureau of Crop Estimates.

Charles D. Reed, Director,
Iowa Weather and Crop Service

IOWA CROPS 1920, ESTIMATED NUMBER OF ACRES BY COUNTIES.

	Corn	Oats	Spring Wheat	Winter Wheat	Barley	Rye	Flax	Potatoes	Tame Hay	Wild Hay	Alfalfa	Pastures
Adair	117,700	49,300	5,240	4,500	8.280	650	----------	781	22,050	4,770	140	112,340
Adams	72,200	26,400	870	5,700	1,450	600	10	484	16,800	2,260	1,150	97,820
Allamakee	46,000	43,200	5,390	1,100	5,270	450	45	1,518	55,650	1,330	20	187,310
Appanoose	50,000	15,400	2,560	7,430	30	950	70	176	28,140	870	50	127,630
Audubon	95,100	49,400	6,170	890	7,250	30	----------	517	22,890	1,850	1,580	73,440
Benton	138,500	99,400	1,810	580	5,850	1,090	----------	1,056	50,295	1,970	90	122,030
Black Hawk	112,200	72,600	1,810	410	3,990	2,000	45	1,397	29,400	8,920	130	92,810
Boone	135,000	84,100	3,040	310	830	80	10	264	19,215	6,120	590	83,920
Bremer	68,400	56,500	420	40	1,620	800	10	1,683	21,525	20,800	100	71.770
Buchanan	108,500	72,300	760	40	3,190	1,310	----------	836	36,540	12,200	120	102,680
Buena Vista	141,300	102,000	2,230	10	790	210	125	1,265	22,890	7,900	1,100	68,200
Butler	106,800	86,200	760	0	1,100	1,000	10	1,375	29,505	11,303	30	95,620
Calhoun	141,900	114,200	630	20	450	220	10	451	20,055	3,030	420	54,740
Carroll	116,900	75,000	7,880	440	2,460	150	10	1,870	27,825	6,240	360	80,090
Cass	125,800	46,600	5,970	14,200	10,700	2,000	----------	913	23,205	1,180	960	105,760
Cedar	99,400	44,200	2,200	2,700	9,320	740	----------	825	51,450	170	90	119,850
Cerro Gordo	91,000	82,100	3,200	0	2,080	50	205	1,474	33,705	9,770	40	82,530
Cherokee	135,000	87,900	1,470	0	1,080	100	----------	1,144	25,935	8,000	3,230	81,700
Chickasaw	72,700	61,800	5,030	40	3,600	220	295	1,122	30,030	11,800	10	86,880
Clarke	59,500	24,300	380	7,000	150	340	75	165	24,675	80	20	112,650
Clay	118,100	89,800	550	20	1,450	170	325	561	24,465	11,400	630	82,290
Clayton	79,700	72,100	4,290	1,190	9,210	540	5	2,442	69,090	910	70	189,760
Clinton	112,800	46,300	3,090	2,840	8,560	2,550	----------	726	61,215	2,000	350	143,260
Crawford	138,400	69,900	21,000	1,170	4,760	150	15	1,771	47,250	5,290	8,050	123,960
Dallas	137,700	64,200	2,570	10,700	1,230	500	----------	176	18,270	2,000	850	100,400
Davis	49,300	18,200	1,200	4,900	70	1,050	----------	506	51,660	40	30	153.250
Decatur	69,700	25,000	1,170	11,700	90	1,100	----------	154	30,870	140	130	136,970
Delaware	89,800	64,500	1,700	60	9,320	2,160	----------	1,012	44,625	6,030	50	116,660
Des Moines	58,100	24,200	1,410	10,400	520	1,790	20	858	29,505	20	350	83,280
Dickinson	64,800	55,200	2,860	0	1,980	180	560	506	15,750	11,700	210	54,040
Dubuque	73,500	50,000	4,290	460	4,860	330	----------	2,574	70,245	900	120	137,150
Emmet	71,000	60,800	620	0	1,640	340	595	506	21,840	6,340	60	50,920
Fayette	96,800	82,700	2,570	220	7,040	700	15	1,815	57,750	12,630	10	154,750
Floyd	97,200	78,900	2,170	10	1,840	660	60	1,342	35,595	4,670	360	78,330
Franklin	119,300	89,700	680	0	1,600	270	40	1,815	35,280	7,720	20	85,170
Fremont	129,700	13,800	880	18,500	460	690	5	407	10,080	6,100	13,200	77,170
Greene	155,000	86,300	1,690	270	560	40	----------	275	21,105	4,420	170	80,350
Grundy	115,000	84,600	1,050	150	1,170	60	----------	2,398	26,880	5,550	130	73,110
Guthrie	118,200	56,600	5,250	1,760	1,600	80	----------	319	26,040	3,480	510	116,710
Hamilton	135,400	103,200	1,590	140	610	80	35	594	21,525	5,260	170	71,920
Hancock	106,400	91,500	2,640	20	1,860	220	250	1,089	28,980	16,100	280	82,300

Hardin	119,600	84,600	660	40	1,440	120	25	814	25,515	4,160	90	79,650
Harrison	155,500	32,800	26,500	12,600	2,850	330	15	1,034	8,400	7,980	22,520	105,220
Henry	69,200	28,600	550	3,370	190	1,130		341	26,565	10	110	101,570
Howard	49,600	58,000	2,850	60	4,890	270	1,000	1,144	37,905	14,160	10	84,780
Humboldt	104,000	75,600	1,530	150	2,160	210	100	484	18,375	5,540	120	42,270
Ida	94,200	60,700	3,320	70	2,140	30	5	1,133	25,200	1,890	2,680	64,220
Iowa	94,500	44,700	1,520	1,310	1,240	460		1,584	37,905	400	50	120,140
Jackson	61,200	30,100	3,980	1,550	2,540	880		1,309	65,730	1,700	130	186,180
Jasper	160,200	66,100	9,430	5,320	520	600		605	40,635	600	150	145,840
Jefferson	66,900	21,100	720	4,470	170	540		473	35,595		250	112,020
Johnson	103,300	47,700	1,130	2,050	1,290	1,500		1,419	48,195	900	210	128,650
Jones	81,600	41,000	850	260	6,130	820	10	924	56,700	190	390	149,560
Keokuk	106,200	45,000	3,330	3,700	560	740		693	42,525	40	80	127,590
Kossuth	194,000	167,100	1,870	10	5,000	4,200	1,100	1,716	38,745	30,400	270	118,620
Lee	55,400	20,700	1,230	13,800	500	8,740		1,540	32,865	50	460	145,260
Linn	118,400	67,700	1,480	430	2,450	1,520	20	1,782	47,880	2,800	130	172,190
Louisa	66,500	24,500	500	11,800	240	3,270		462	18,375	110	60	78,190
Lucas	51,300	21,200	1,000	8,500	50	510	30	143	22,575	100	120	117,360
Lyon	134,100	112,400	2,530	10	4,860	80	15	2,442	15,225	10,300	3,770	63,260
Madison	88,500	27,600	1,440	16,800	3,000	610	90	264	20,790	1,070	480	132,960
Mahaska	118,200	48,500	3,420	5,240	520	750	5	605	33,600	140	140	122,520
Marion	93,900	36,300	4,370	14,360	880	550		484	23,730	930	840	126,680
Marshall	115,000	74,500	2,120	630	800	90		847	34,860	210	70	90,530
Mills	107,200	18,800	3,330	10,960	1,090	590		561	9,135	4,420	13,960	70,490
Mitchell	68,800	85,900	2,900	80	2,080	110	735	5,137	33,390	3,420	30	72,350
Monona	126,100	27,600	22,000	21,600	2,150	140		880	9,135	16,600	18,700	102,290
Monroe	44,500	16,300	3,350	10,050	140	600	60	220	28,350	60	40	131,280
Montgomery	89,200	21,800	1,940	17,000	1,810	2,000	20	539	19,950	530	4,870	69,960
Muscatine	82,600	22,300	1,520	6,970	2,670	4,000		1,353	24,570	590	560	77,430
O'Brien	119,100	91,700	1,590	30	4,700	80	85	1,133	25,725	6,750	1,420	75,550
Osceola	82,500	74,900	510	10	2,900	30	215	1,067	17,640	7,390	280	48,740
Page	97,600	21,700	750	21,460	940	1,510		869	23,520	910	5,930	100,680
Palo Alto	140,000	89,300	840	0	1,370	430	1,130	594	17,325	18,760	180	66,070
Plymouth	200,000	96,400	31,500	460	2,910	80		1,980	25,200	19,470	16,600	110,180
Pocahontas	135,200	113,800	910	90	1,750	830	90	1,001	21,000	7,680	260	57,780
Polk	117,500	48,500	10,000	15,700	100	820	70	539	17,430	2,490	600	79,360
Pottawattamie	220,000	56,900	16,440	14,400	11,800	1,750	30	5,170	26,460	6,470	21,700	133,140
Poweshiek	112,300	59,600	2,520	260	1,070	390		616	36,225	90	80	117,180
Ringgold	83,100	35,300	860	4,030	250	520		165	23,625	470	60	130,420
Sac	125,200	87,100	650	0	5,430	30		891	26,565	3,840	580	75,770
Scott	87,800	27,100	5,340	14,500	20,000	2,750		3,850	28,350	1,470	1,460	79,640
Shelby	128,200	62,800	10,300	680	7,120	170	175	1,001	31,500	6,400	3,980	94,680
Sioux	179,100	123,500	18,400	390	11,000	20	30	1,716	23,100	14,610	9,040	80,710
Story	144,300	86,200	390	350	150	240	20	77	24,675	2,290	180	67,390
Tama	133,400	81,900	3,770	690	4,490	120	230	1,298	47,250	830	100	132,490
Taylor	100,400	28,100	1,240	8,930	380	1,110		506	22,575	990	840	119,450
Union	68,900	32,600	980	2,200	1,760	760	50	583	19,110	1,030	160	111,640
Van Buren	54,200	16,100	370	6,670	80	2,000		253	35,910	30	390	144,240
Wapello	58,600	15,600	3,310	11,200	310	1,060		704	27,720	40	260	103,180
Warren	85,500	22,500	3,210	28,500	890	950	300	319	25,725	720	310	139,820

IOWA CROPS, 1920, ESTIMATED NUMBER OF ACRES BY COUNTIES—Continued.

	Corn	Oats	Spring Wheat	Winter Wheat	Barley	Rye	Flax	Potatoes	Tame Hay	Wild Hay	Alfalfa	Pastures
Washington	100,500	46,000	1,020	2,060	160	340	10	605	39,270	30	170	123,880
Wayne	73,800	34,300	440	5,520	310	710	40	44	33,600	40	90	120,080
Webster	158,900	130,000	4,370	80	890	50	65	638	24,990	8,720	680	87,770
Winnebago	73,200	57,500	5,280	0	3,590	110	1,050	968	22,050	20,650	70	57,500
Winneshiek	83,200	77,900	11,300	560	9,330	350	660	1,738	56,700	5,160	10	152,760
Woodbury	175,100	67,100	25,000	7,830	1,800	440	75	2,068	17,850	9,390	27,200	106,210
Worth	55,200	64,000	4,920	50	2,320	200	1,570	1,177	27,930	14,880	30	62,830
Wright	117,700	95,600	1,770	40	1,920	110	30	836	29,610	5,840	70	67,960
Total	10,300,000	5,893,600	400,000	431,000	284,000	80,000	12,000	104,500	3,020,850	510,000	200,000	10,137,680

AVERAGE AND TOTAL YIELDS OF IOWA CROPS, 1920, BY COUNTIES—PART I.

Counties	Corn		Oats		Spring Wheat		Winter Wheat		Barley	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels
Adair	43	5,061,000	39	1,922,700	9	47,200	18	81,000	27	223,560
Adams	42	3,032,000	41	1,082,400	10	8,700	17	96,900	29	42,050
Allamakee	47	2,162,000	43	1,857,600	13	70,000	22	24,200	30	158,100
Appanoose	41	2,050,000	34	523,600	12	30,700	15	111,450	30	900
Audubon	41	3,899,000	35	1,729,000	11	67,900	20	17,800	29	210,250
Benton	49	6,786,000	40	3,976,000	18	32,600	23	13,340	24	140,400
Black Hawk	44	4,937,000	39	2,831,400	15	27,200	15	6,150	29	115,710
Boone	47	6,345,000	41	3,448,100	14	42,600	20	6,200	30	24,900
Bremer	50	3,420,000	37	2,090,500	13	5,500	22	880	34	55,080
Buchanan	41	4,448,000	38	2,747,400	14	10,700	18	720	30	95,700
Buena Vista	51	7,206,000	38	3,876,000	15	33,500	16	160	29	22,910
Butler	48	5,126,000	41	3,534,200	11	8,400	----	----------	27	29,700
Calhoun	49	6,953,000	42	4,796,400	13	8,200	18	360	30	13,500
Carroll	51	5,962,000	45	3,375,000	11	86,700	19	8,360	28	68,880
Cass	44	5,535,000	39	1,817,400	11	65,700	20	284,000	29	310,300
Cedar	51	5,069,000	46	2,033,200	15	33,000	23	62,100	27	251,640
Cerro Gordo	47	4,277,000	41	3,366,100	12	38,400	----	----------	26	54.080
Cherokee	50	6,750,000	37	3,252,300	9	13,200	----	----------	32	34,560
Chickasaw	39	2,835,000	38	2,348,400	10	50,300	10	400	27	97,200
Clarke	40	2,380,000	30	729,000	13	5,000	12	84,000	32	4,800
Clay	50	5,905,000	36	3,232,800	10	5,500	21	420	28	40,600
Clayton	49	3,905,000	44	3,172,400	14	60,100	22	26,180	25	230,250
Clinton	51	5,753,000	37	1,713,100	15	46,400	20	56,800	22	188,320
Crawford	45	6,228,000	41	2,865,900	11	231,000	22	25,740	29	138,040
Dallas	49	6,747,000	40	2,568,000	12	30,800	22	235,400	29	35,670
Davis	40	1,972,000	33	600,600	14	16,800	16	78,400	35	2,450
Decatur	38	2,649,000	28	700,000	14	16,400	14	163,800	27	2,430
Delaware	42	3,772,000	32	2,064,000	16	27,200	17	1,020	23	214,360
Des Moines	52	3,021,000	38	919,600	14	19,700	22	228,800	35	18,200
Dickinson	43	2,786,000	37	2,042,400	9	25,700	----	----------	24	47,520
Dubuque	49	3,602,000	35	1,750,000	17	72,900	15	6,900	24	116,640
Emmet	40	2,840,000	38	2,310,400	12	7,400	----	----------	24	39,360
Fayette	47	4,550,000	39	3,225,300	12	30,800	23	5,060	30	211,200
Floyd	45	4,374,000	39	3,077,100	9	19,500	16	160	27	49,680
Franklin	49	5,846,000	47	4,215,900	13	8,800	----	----------	30	48,000
Fremont	52	6,744,000	50	690,000	15	13,200	25	462,500	40	18,400
Greene	46	7,130,000	41	3,538,300	9	15,200	20	5,400	30	16,800
Grundy	54	6,210,000	45	3,807,000	13	13,700	24	3,600	25	29,250
Guthrie	40	4,728,000	38	2,150,800	13	68,300	17	29,920	30	48,000
Hamilton	55	7,447,000	40	4,128,000	13	20,700	30	4,200	27	16,470
Hancock	42	4,469,000	48	4,392,000	11	29,000	17	340	28	52,080
Hardin	49	5,860,000	40	3,384,000	14	9,200	22	880	31	44,640
Harrison	42	6,531,000	42	1,377,600	12	318,000	26	327,600	35	99,750
Henry	47	3,252,000	41	1,172,600	12	6,600	19	64,030	24	4,560
Howard	36	1,786,000	40	2,320,000	9	25,600	10	600	30	146,700
Humboldt	47	4,888,000	40	3,024,000	15	23,000	20	3,000	31	66,960
Ida	45	4,239,000	39	2,367,300	9	29,900	15	1,050	28	59,920
Iowa	43	4,064,000	37	1,653,900	14	21,300	22	28,820	23	28,520
Jackson	48	2,938,000	35	1,053,500	17	67,700	22	34,100	29	73,660
Jasper	43	6,889,000	42	2,776,200	13	122,600	21	111,720	37	19,240
Jefferson	40	2,676,000	31	654,100	5	3,600	16	71,520	25	4,250
Johnson	51	5,268,000	41	1,955,700	18	20,300	23	47,150	27	34,830
Jones	50	4,080,000	40	1,640,000	16	13,600	22	5,720	29	177,770
Keokuk	48	5,098,000	38	1,710,000	10	33,300	21	77,700	22	12,320
Kossuth	45	8,730,000	40	6,684,000	15	28,000	23	230	30	150,000
Lee	42	2,327,000	39	807,300	13	16,000	16	220,800	27	13,500
Linn	44	5,210,000	39	2,640,300	13	19,200	20	8,600	24	58,800
Louisa	48	3,192,000	40	980,000	14	7,000	22	259,600	32	7,680
Lucas	39	2,001,000	32	678,400	16	16,000	14	119,000	32	1,600
Lyon	49	6,571,000	34	3,821,600	10	25,300	12	120	28	136,080
Madison	49	4,336,000	46	1,269,600	11	15,800	19	319,200	31	93,000
Mahaska	47	5,555,000	37	1,794,500	15	51,300	23	120,520	20	10,400
Marion	46	4,319,000	36	1,306,800	15	65,600	18	258,480	36	31,680
Marshall	49	5,635,000	40	2,980,000	18	38,200	23	14,490	33	26,400
Mills	49	5,253,000	39	733,200	12	40,000	19	208,240	30	32,700
Mitchell	44	3,027,000	43	3,693,700	9	26,100	19	1,520	29	60,320
Monona	39	4,918,000	36	993,600	8	176,000	20	432,000	25	53,750
Monroe	39	1,736,000	31	505,300	11	36,900	17	170,850	30	4,200
Montgomery	44	3,925,000	39	850,200	9	17,500	19	323,000	31	56,110

AVERAGE AND TOTAL YIELDS IOWA CROPS, 1920, BY COUNTIES—PART I—Continued

Counties	Corn		Oats		Spring Wheat		Winter Wheat		Barley	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels
Muscatine	44	3,634,000	39	869,700	14	21,300	20	139,400	28	74,760
O'Brien	50	5,955,000	35	3,209,500	9	14,300	20	600	26	122,200
Osceola	43	3,548,000	38	2,846,200	9	4,600	16	160	27	78,300
Page	43	4,197,000	40	868,000	14	10,500	22	472,120	21	19,740
Palo Alto	45	6,300,000	43	3,839,900	13	10,900	----	----------	27	36,990
Plymouth	41	8,200,000	28	2,699,200	8	252,000	18	8,280	20	58.200
Pocahontas	49	6,625,000	37	4,210,600	16	14,600	18	1,620	30	52,500
Polk	50	5,875,000	39	1,891,500	13	130,000	23	361,100	33	3,300
Pottawattamie	45	9,900,000	41	2,332,900	14	230,000	25	360,000	30	354,000
Poweshiek	45	5,054,000	38	2,264,800	15	37,800	21	5,460	25	26,750
Ringgold	40	3,324,000	38	1,341,400	11	9,500	12	48,360	25	6,250
Sac	49	6,135,000	39	3,396,900	14	9,100	----	----------	39	211,770
Scott	52	4,566,000	44	1,192,400	17	90,800	21	304,500	23	460,000
Shelby	41	5,256,000	39	2,449,200	13	133,900	22	14,960	30	213,600
Sioux	50	8,955,000	31	3,828,500	8	147,000	17	6,630	25	275,000
Story	50	7,215,000	40	3,448,000	17	6,600	20	7,000	35	5,250
Tama	47	6,270,000	39	3,194,100	18	67,900	23	15,870	29	130,210
Taylor	36	3,614,000	32	899,200	10	12,400	21	187,530	25	9,500
Union	39	2,687,000	31	1,010,600	10	9,800	15	33,000	24	42,240
Van Buren	40	2,168,000	33	531,300	16	5,900	19	126,730	29	2.320
Wapello	43	2,520,000	38	592,800	12	39,700	19	212,800	30	9,300
Warren	45	3,848,000	42	945,000	13	41,700	18	513,000	35	31,150
Washington	46	4,623,000	35	1,610,000	13	13,300	21	43,260	25	4,000
Wayne	41	3,026,000	31	1,063,300	17	7,500	12	66,240	28	8,680
Webster	49	7,786,000	40	5,200,000	10	43,700	20	1,600	30	26,700
Winnebago	47	3,440,000	47	2,702,500	11	58,100	----	----------	22	78,980
Winneshiek	50	4,160,000	38	2,960,200	10	113,000	19	10,640	27	251,910
Woodbury	40	7,004,000	38	2,549,800	7	175,000	21	164,430	28	50,400
Worth	51	2,815,000	40	2,560,000	9	44,300	21	1,050	30	69,600
Wright	50	5,885,000	42	4,015,200	15	26,600	19	760	36	69,120
	46.0	473,800,000	39.0	229,850,400	11.3	4,520,000	19.7	8,490,700	27.5	7,810,000

AVERAGE AND TOTAL YIELDS OF IOWA CROPS, 1920, BY COUNTIES—PART II.

Counties	Rye		Flax Seed		Potatoes		Hay, Tame		Hay, Wild		Alfalfa	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Tons per acre	Total Tons	Tons per acre	Total Tons	Tons per acre	Total Tons
Adair	12	7,800	----	--------	79	61,699	1.4	30,870	2.0	9,540	1.0	140
Adams	16	9,600	10	100	78	37,752	1.5	25,200	1.6	3,616	2.8	3,220
Allamakee	16	7,200	14	630	139	211,002	1.7	94,600	2.1	2,793	2.3	46
Appanoose	15	14,250	10	700	79	13,904	1.0	28,140	1.1	957	3.5	175
Audubon	18	540	----	--------	101	52,217	1.7	38,910	2.0	3,700	3.5	5,530
Benton	18	19,620	----	--------	110	116,116	1.5	75,440	1.5	2,955	4.0	360
Black Hawk	15	30,000	10	450	120	167,640	1.4	41,160	1.2	10,704	3.0	390
Boone	22	1,760	10	100	137	36,168	1.6	30,740	1.0	6,120	2.5	1,475
Bremer	12	9,600	10	100	125	210,375	1.5	32,890	1.3	27,040	3.0	300
Buchanan	16	20,960	----	--------	96	80,256	1.5	54,810	1.5	18,300	3.0	360
Buena Vista	25	5,250	12	1,500	123	155,595	1.5	34,330	1.5	11,850	3.2	3,520
Butler	17	17,000	9	90	99	136,125	1.4	41,300	1.2	13,560	2.8	84
Calhoun	17	3,740	10	100	114	51,414	1.6	32,090	1.1	3,333	3.0	1,260
Carroll	19	2,850	10	100	101	188,870	1.4	38,960	1.3	8,112	2.7	972
Cass	16	32,000	----	--------	120	109,560	1.4	32,490	1.4	1,652	2.8	2,688
Cedar	18	13,320	----	--------	100	82,500	1.4	72,030	1.2	204	3.0	270
Cerro Gordo	15	750	10	2,050	155	228,470	1.6	37,930	1.1	10,747	3.0	120
Cherokee	18	1,800	----	--------	145	165,880	1.4	36,310	1.3	10,400	3.0	9,690
Chickasaw	15	3,300	8	2,360	97	108,834	1.5	45,040	1.0	11,800	3.2	32
Clarke	15	5,100	10	750	76	12,540	1.3	32,080	1.0	80	3.0	60
Clay	15	2,550	17	5,525	124	69,564	1.7	41,590	1.2	13,680	2.4	1,512
Clayton	17	9,180	14	70	150	366,300	1.4	96,720	1.0	910	3.0	210
Clinton	16	40,800	----	--------	70	50,820	1.5	91,820	1.0	2,000	4.0	1,400
Crawford	20	3,000	10	150	122	216,062	1.4	66,150	1.5	7,935	3.1	24,955
Dallas	21	10,500	----	--------	123	21,648	1.3	23,750	1.4	2,800	3.1	2,635
Davis	16	16,800	----	--------	86	43,516	1.3	67,160	1.0	40	2.8	84
Decatur	12	13,200	----	--------	74	11,396	1.4	43,220	0.5	70	3.5	455
Delaware	12	25,920	----	--------	70	70,840	1.3	58,010	1.1	6,633	3.0	150
Des Moines	20	35,800	10	200	91	78,078	1.3	38,350	1.2	24	2.9	1,015
Dickinson	17	3,060	10	5,600	100	50,600	1.5	23,620	1.0	11,700	3.7	777
Dubuque	18	5,940	----	--------	94	241,956	1.6	112,390	0.9	810	2.2	264
Emmet	11	3,740	9	5,355	112	56,672	1.6	34,940	1.0	6,340	3.5	210
Fayette	19	13,300	9	135	114	206,910	1.6	92,400	1.2	15,156	3.5	35
Floyd	17	11,220	10	600	115	154,330	1.3	46,270	1.3	6,071	2.0	720
Franklin	14	3,780	8	320	113	205,095	1.3	45,860	1.1	8,492	2.9	58
Fremont	18	12,420	10	50	69	28,083	1.6	16,130	2.0	12,200	3.0	39,600
Greene	22	880	----	--------	142	39,050	1.4	29,550	1.0	4,420	3.0	510
Grundy	20	1,200	----	--------	131	314,138	1.3	34,940	1.2	6,660	3.0	390
Guthrie	23	1,840	----	--------	88	28,072	1.4	36,460	1.4	4,872	2.7	1,377
Hamilton	25	2,000	10	350	133	79,002	1.4	30,130	1.0	5,260	3.0	510
Hancock	18	3,960	9	2,250	173	188,397	1.3	37,670	1.1	17,710	3.5	980
Hardin	12	1,440	8	200	112	91,168	1.3	33,170	1.5	6,240	3.2	288
Harrison	16	5,280	10	150	106	109,604	2.0	10,080	1.8	14,364	3.1	69,812
Henry	14	15,820	----	--------	60	20,460	1.3	34,530	1.0	10	3.1	341
Howard	15	4,050	8	8,000	116	132,704	1.3	49,280	1.1	15,576	3.4	34
Humboldt	19	3,990	11	1,100	112	54,208	1.3	23,880	0.9	4,986	2.5	300
Ida	15	450	10	50	127	143,891	1.7	42,840	1.3	2,457	3.2	8,576
Iowa	17	7,820	----	--------	96	152,064	1.5	56,860	1.0	400	2.9	145
Jackson	19	16,720	----	--------	115	150,535	1.3	85,450	1.8	3,060	2.7	351
Jasper	20	12,000	----	--------	102	61,710	1.6	65,020	1.8	1,080	3.9	585
Jefferson	14	7,560	----	--------	69	32,637	1.4	49,830	----	--------	3.0	750
Johnson	18	27,000	----	--------	90	127,710	1.7	81,930	0.8	720	2.6	546
Jones	20	16,400	10	100	126	116,424	1.6	90,720	1.5	285	4.0	1,560
Keokuk	15	11,100	----	--------	102	70,686	1.4	59,530	1.2	48	3.0	240
Kossuth	16	67,200	9	9,900	125	214,500	1.3	50,370	1.1	33,440	2.5	675
Lee	16	139,840	----	--------	86	132,440	1.4	46,010	1.2	60	2.9	1,334
Linn	14	21,280	10	200	103	183,546	1.4	67,030	1.0	2,800	2.7	351
Louisa	14	45,780	----	--------	71	32,802	1.3	23,840	1.6	176	3.4	204
Lucas	15	7,650	10	300	106	15,158	1.3	29,350	1.1	110	3.0	360
Lyon	15	1,200	10	150	93	227,106	1.6	24,360	1.4	14,420	2.7	10,179
Madison	17	10,370	10	900	113	29,832	1.4	29,100	1.3	1,391	2.4	1,152
Mahaska	16	12,000	10	50	107	64,735	1.2	40,320	1.5	210	3.0	420
Marion	16	8,800	----	--------	93	45,012	1.1	26,100	1.7	1,581	3.0	2,520
Marshall	20	1,800	----	--------	121	102,487	1.3	45,320	1.3	273	3.0	210
Mills	16	9,440	----	--------	137	76,857	1.6	14,620	1.3	5,746	3.2	44,672
Mitchell	17	1,870	12	8,710	146	750,080	1.5	50,080	1.8	6,156	3.0	90
Monona	18	2,520	----	--------	136	119,680	2.0	18,270	1.7	28,220	3.1	57,970
Monroe	14	8,400	10	600	123	26,180	1.3	36,850	1.2	72	3.1	124
Montgomery	21	42,000	10	200	98	52,822	1.5	29,920	1.0	530	3.3	16,071

AVERAGE AND TOTAL YIELDS OF IOWA CROPS, 1920, BY COUNTIES—PART II—Continued.

Counties	Rye		Flax Seed		Potatoes		Hay, Tame		Hay, Wild		Alfalfa	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Tons per acre	Total Tons	Tons per acre	Total Tons	Tons per acre	Total Tons
Muscatine	14	56,000	----	--------	91	123 123	1.4	34,400	1.5	885	3.5	1,960
O'Brien	20	1,600	10	850	116	131 428	1.7	43,730	1.2	8,100	4.4	6,248
Osceola	20	600	10	2,150	125	133 375	1.5	26,460	1.2	8,868	2.2	616
Page	19	28,690	----	--------	65	56 485	1.6	37,630	1.2	1,092	3.0	17,790
Palo Alto	19	8,170	9	10,170	119	70 686	1.2	20,790	1.1	20,636	3.5	630
Plymouth	17	1,360	----	--------	103	203 940	1.5	37,800	1.3	25,311	3.2	53,120
Pocahontas	18	14,940	10	900	130	13,000	1.6	33,600	1.3	9,984	3.2	832
Polk	15	12,300	10	700	89	47,971	1.3	22,660	1.2	2,988	2.3	1,380
Pottawattamie	20	35,000	10	300	117	604,890	1.8	47,630	1.6	10,352	3.1	67,270
Poweshiek	16	6,240	----	--------	92	56,672	1.4	50,710	1.4	126	2.5	200
Ringgold	16	8,320	----	--------	94	15.610	1.3	30,700	1.0	470	2.0	120
Sac	16	480	----	--------	76	67.716	1.5	39,850	1.3	4,992	2.8	1,624
Scott	16	44,000	----	--------	85	327,250	1.4	39,690	1.5	2,205	3.1	4.526
Shelby	19	3,230	10	1,750	95	95,095	1.3	40,950	1.3	8,320	2.7	10,746
Sioux	14	280	10	300	156	267,696	1.9	43,890	1.6	23,376	3.2	28,928
Story	20	4,800	10	200	106	8,162	1.3	32,080	1.2	2,748	2.3	414
Tama	20	2,400	10	2,300	91	118,118	1.5	70,870	1.2	996	2.0	200
Taylor	15	16,650	----	--------	54	27,324	1.4	31,600	1.2	1,188	2.2	1,848
Union	12	9,120	10	500	76	44,308	1.4	26,750	1,2	1,236	2.2	352
Van Buren	16	32,000	----	--------	88	22,264	1.3	46,680	1.0	30	2.9	1,131
Wapello	15	15,900	----	--------	119	83,776	1.4	38,860	1.1	44	3.0	780
Warren	17	16,150	10	3,000	96	30,624	1.2	30,870	1.3	936	2.3	713
Washington	17	5,780	10	100	68	41,140	1.5	58,900	1.1	33	3.0	510
Wayne	16	11,360	10	400	86	3.784	1.3	43,680	1.0	40	3.5	315
Webster	21	1,050	11	715	112	71,456	1.4	34,980	1.1	9,592	3.2	2,176
Winnebago	17	1,870	10	10,500	149	144,232	1.5	33,080	1.2	24,780	4.0	280
Winneshiek	19	6,650	10	6,600	74	128,612	1.6	90,720	1.2	6,192	3.8	38
Woodbury	20	8.800	10	750	116	239,888	1.9	33,910	1.4	13,146	2.6	70,720
Worth	16	3,200	11	17,270	103	121,231	1.6	44,690	1.1	16,368	3.3	98
Wright	16	1,750	10	300	133	111,188	1.5	44,410	1.2	7,008	2.5	175
	16.2	1,296,000	10.0	120,000	110.0	11,495,350	1.44	4,349,620	1.27	647,700	2.84	568,140

PART IX

Farm Statistics for the Year Ending December 31, 1920. Collected by Township Assessors, Reported by County Auditors and Tabulated by the Iowa Weather and Crop Service

The statistical books of assessors after being checked and tabulated by County Auditors were brought to the office of the Iowa Weather and Crop Service in Des Moines for further checking, inspection and tabulation for the Year Book, as provided by the 39th General Assembly. In all but a comparatively few cases, the work of the assessors showed evidence of loyal devotion to duty and the exercise of care and intelligence. The handling of the assessors books at Des Moines afforded much valuable first hand information as to the problems that confront the assessors in the field. Special gratitude is due to those assessors who took the time and trouble to write extensive explanatory notes or criticisms. All will tend to improve the instructions with a view to greater uniformity. Many letters were written to assessors or individual farmers where doubtful entries were discovered. Hundreds of errors, some very important, were corrected.

Corn increased 569,938 acres in 1920 over the preceding year; oats increased 267,844 acres; spring wheat decreased 426,112 acres; and winter wheat decreased 412,388 acres. Spring wheat was almost a failure in 1919 and 1920 and the acreage of 1920 is probably the least in 40 years. Winter wheat, on the other hand, has scarcely dropped to a pre-war level. Potato acreage dropped in 1920 to 65,560 which is the lowest in 40 years. Tame hay and pastures show a liberal increase. Pop corn, which has increased steadily in recent years, dropped in 1920 to 17,746 acres, which is about half of the 1919 acreage. Clover seed increased to 141,890 acres, which is the largest in the history of the State and placed Iowa in fifth place among the clover seed producing states. The increase was mainly in a belt extending from Woodbury County southeast and south to Page and Taylor Counties. Most of the eastern counties showed a decreased acreage. Due to the unusual demand, most of this seed was exchanged between farms and not much reached the usual channels of trade. Timothy seed acreage increased slightly but was only about half of the record acreage of 1912. Pastures increased slightly.

Swine on farms July 1, 1920 fell off 399,548 head as compared with the same date in 1919. Cattle on January 1 decreased 268,817 and there was a slight decrease in all other classes of live stock and poultry.

TABLE NO. 1.

Total number, average size and total acreage of farms; total acreage occupied by farm buildings, public highways and feed lots; acreage in pasture; crops not otherwise enumerated; and land not utilized for any purpose. Also number of silos and tons of silage put up; total bushels of apples harvested; total number of tractors, automobiles and auto-trucks on farms; and modern homes; all by counties for the year, 1920.

Counties	Number of farms	Average size of farms	Total acreage of farms	Total number of acres occupied by farm buildings, public highways and feed lots	Acreage in pasture	Number bushels of apples harvested	Acreage in crops not otherwise enumerated	Acreage in waste land not utilized for any purpose	Number of silos on farms	Number of tons of silage put up	Number of tractors on farms	Number of automobiles on farms	Number of auto-trucks on farms	Home modern		
														Heat	Bath	Light
Adair	2,132	164	349,897	16,204	116,599	10,443	222	1,113	189	13,799	85	1,803	106	148	140	156
Adams	1,499	169	253,512	11,341	99,637	5,684	368	1,997	164	11,213	64	1,233	82	95	93	89
Allamakee	2,328	169	394,492	9,976	176,790	8,748	47	53,574	411	28,648	111	1,904	40	594	333	477
Appanoose	2,105	135	285,900	11,729	133,671	16,496	1,249	10,270	76	3,027	58	1,135	30	66	45	38
Audubon	1,760	156	273,723	14,143	72,330	4,654	154	797	170	9,345	83	1,614	221	261	203	218
Benton	2,515	172	432,671	21,897	116,504	22,597	648	1,031	567	50,437	417	2,233	229	510	366	425
Black Hawk	2,205	151	333,453	15,697	90,847	12,601	1,792	2,984	831	71,698	262	1,801	99	464	216	302
Boone	2,368	143	338,644	16,285	78,926	6,911	408	1,918	251	18,278	368	2,186	99	329	264	408
Bremer	1,792	136	243,217	11,871	69,960	4,317	571	1,490	585	48,854	187	1,412	56	217	88	167
Buchanan	2,259	151	340,234	15,814	105,264	2,646	16	987	452	43,795	145	1,786	58	265	169	240
Buena Vista	2,021	174	351,165	19,032	67,724	2,256	402	770	284	23,882	360	2,027	213	343	239	225
Butler	2,158	160	344,961	18,656	92,445	5,445	365	1,392	385	31,275	188	1,685	40	182	100	155
Calhoun	1,942	175	340,246	16,135	52,080	2,645	39	1,071	78	6,412	347	1,967	106	316	244	224
Carroll	2,147	163	348,937	19,532	80,019	2,807	245	1,608	124	11,161	325	2,265	174	308	218	388
Cass	2,155	160	344,756	16,240	99,669	3,762	444	2,299	197	8,358	193	2,005	272	321	301	337
Cedar	2,468	144	355,085	15,366	119,353	11,590	110	2,097	302	27,229	259	2,051	51	600	382	461
Cerro Gordo	1,952	170	332,308	17,238	84,339	3,774	1,789	4,706	479	42,976	229	1,543	61	356	211	360
Cherokee	1,798	196	352,020	19,598	79,342	2,426	214	1,958	210	20,626	330	1,852	277	248	218	294
Chickasaw	1,878	150	281,823	14,563	84,771	2,838	5	1,466	355	33,569	80	1,300	22	99	50	83
Clarke	1,467	176	258,602	9,653	115,004	7,704	257	5,802	156	9,791	56	984	30	87	66	69
Clay	1,756	189	331,368	17,595	75,127	457	270	2,035	235	22,403	395	1,716	64	256	146	261
Clayton	3,093	146	453,076	16,282	189,396	10,750	219	15,875	530	38,298	333	2,303	61	721	326	454
Clinton	2,609	156	407,428	18,564	143,790	4,267	466	2,480	313	31,969	321	2,119	69	441	241	379
Crawford	2,303	190	437,063	23,338	124,493	4,377	12	2,391	107	8,735	242	2,355	221	230	196	234
Dallas	2,409	148	356,611	17,350	96,240	13,999	1,778	4,761	271	28,250	417	1,883	215	345	237	278
Davis	2,217	138	306,572	8,984	158,467	6,523	235	4,370	61	3,309	54	1,110	39	103	74	94
Decatur	2,109	152	320,597	12,121	142,899	9,562	570	5,392	82	3,505	73	1,080	44	129	120	129

Delaware	2,209	154	340,817	13,616	113,891	4,908	226	5,764	706	50,644	176	1,769	34	342	154	258
Des Moines	1,996	121	239,801	8,797	96,041	47,318	574	7,553	181	13,253	176	1,380	64	320	207	407
Dickinson	1,030	204	210,862	10,650	50,828	3,571	47	2,563	105	9,358	129	922	37	79	51	66
Dubuque	2,360	153	361,982	10,138	152,471	16,581	922	6,201	196	15,351	116	1,696	79	288	118	230
Emmet	1,179	194	228,607	11,367	50,699	1,524	1,015	4,242	251	23,021	195	1,074	44	67	48	104
Fayette	3,195	135	432,124	19,614	156,530	7,646	168	2,962	785	62,175	188	2,147	46	506	239	381
Floyd	1,925	157	302,885	15,118	77,055	15,140	251	1,836	535	47,339	167	1,438	19	286	181	151
Franklin	2,030	174	353,127	19,310	80,062	2,978	2,454	1,862	418	49,742	258	1,870	27	300	197	172
Fremont	1,878	160	300,786	11,713	76,099	16,644	615	8,678	88	6.731	122	1,244	122	210	184	220
Greene	1,961	175	342,405	16,087	73,391	4,598	159	1,752	87	7,496	334	1,945	47	292	209	209
Grundy	1,690	181	305,946	15,905	71,272	5,234	62	350	311	34,041	308	1,641	125	365	207	395
Guthrie	2,248	156	350,803	15,028	116,900	6,658	728	2,304	105	4,956	119	1,725	211	195	176	180
Hamilton	2,113	163	343,838	16,517	66,411	3,209	167	2,563	289	22,990	424	1,933	182	300	233	421
Hancock	1,848	189	348,432	17,646	78,448	2,818	6,738	3,720	331	31,333	227	1,503	19	182	109	132
Hardin	1,957	166	325,641	17,393	74,386	6,653	113	908	339	37,091	286	1,792	27	276	202	251
Harrison	2,650	150	398,688	16,538	100,264	4,992	1,891	12,749	94	4,850	298	1,950	95	148	137	143
Henry	1,855	135	250,126	9,697	99,126	14,711	150	787	134	9,975	175	1,442	35	327	277	379
Howard	1,788	157	280,014	13,022	86,297	4,926	98	3,861	352	27,172	87	1,126	38	101	54	60
Humboldt	1,395	185	258,865	14,492	43,774	2,216	2,035	2,860	317	32,342	355	1,426	81	228	151	157
Ida	1,472	185	271,971	14,853	59,993	2,363	254	1,520	69	5,610	220	1,511	202	215	183	258
Iowa	2,185	160	349,708	14,535	128,793	31,701	601	2,950	444	40,972	262	1,925	260	395	264	313
Jackson	2,484	157	390,112	11,247	190,428	6,970	6	12,497	326	27,930	76	1,681	35	301	143	237
Jasper	3,142	142	447,711	23,094	149,314	15,225	323	5,706	406	32,200	217	2,406	90	486	346	317
Jefferson	1,947	136	264,546	8,855	113,785	17,532	201	1,116	193	10,739	115	1,384	26	185	118	145
Johnson	2,475	142	351,531	13,190	128,441	33,610	243	4,362	399	28,446	342	2,084	184	516	328	466
Jones	2,211	153	337,661	10,940	146,389	7,161	427	2,632	455	45,000	158	1,705	31	380	214	353
Keokuk	2,628	130	342,008	15,081	121,775	37,752	584	5,479	294	19,399	203	2,085	76	375	316	464
Kossuth	3,008	197	592,337	29,419	118,974	6,689	1,578	8,053	686	61,648	641	2,943	157	442	311	440
Lee	2,252	139	312,919	8,592	146,265	26,033	2,258	16,830	263	16,635	95	1,205	62	213	89	110
Linn	3,363	122	411,602	16,719	139,385	29,705	1,299	5,706	709	57,265	176	2,352	101	617	293	468
Louisa	1,338	167	223,072	6,230	78,594	20,661	1,143	6,682	214	22,455	179	1,175	83	259	187	206
Lucas	1,514	160	242,147	7,971	114,063	18,518	173	1,550	261	19.464	134	1,135	43	112	106	110
Lyon	1,772	201	355,952	18,676	63,556	3,112	130	1,238	87	7,768	328	1,779	129	225	170	277
Madison	2,197	151	331,141	15,927	138,656	31,262	560	3,563	317	26,704	170	1,633	141	193	171	223
Mahaska	2,945	120	352,187	13,602	123,010	44,080	1,680	5,475	230	15,378	208	2,082	106	380	248	313
Marion	2,230	147	327,338	11,208	132,648	17,785	401	5,717	312	31,264	156	1,761	53	120	98	161
Marshall	2,260	150	339,925	18,800	87,842	7,800	500	1,359	437	36,467	357	2,023	90	591	408	602
Mills	1,590	159	252,030	11,444	64,460	4,399	270	7,089	55	3,585	172	1,167	82	188	157	201
Mitchell	1,835	154	282,224	14,781	69,803	5,389	2,030	2,726	532	55,798	192	1,451	60	299	202	199
Monona	2,169	180	389,407	15,617	98,166	11,538	1,031	13,573	76	5,078	380	1,806	64	228	187	150
Monroe	1,698	147	249,765	8,805	128,144	21,569	311	2,153	140	9,099	63	1,051	18	56	47	46
Montgomery	1,553	162	251,806	11,727	71,180	1,702	1,194	1,661	106	6,942	124	1,549	162	200	171	129
Muscatine	1,588	145	230,197	9,532	75,372	13,075	4,239	3,182	340	31,994	230	1,415	78	351	199	323
O'Brien	1,917	184	352,117	19,907	72,508	2,066	449	868	150	14,255	407	1,810	132	246	179	340
Osceola	1,253	194	243,263	12,882	46,627	2,310	108	2,141	109	8,888	239	1,204	40	87	34	93
Page	2,115	150	316,602	14,640	103,198	3,487	802	2,554	68	4,998	174	1,812	158	279	266	186
Palo Alto	1,743	187	326,821	17,336	63,861	3,271	194	3,562	203	22,520	268	1,574	74	156	103	90
Plymouth	2,696	194	522,889	26,730	110,842	2,260	275	1,350	163	15,406	466	2,813	496	378	231	277
Pocahontas	1,995	174	346,832	18,102	54,320	1,296	167	2,301	142	10,257	423	1,986	135	130	172	227
Polk	2,650	119	316,411	13,674	80,766	93,759	1,604	7,311	265	17.520	315	1,719	129	340	225	325

TABLE NO. 1—Continued.

Counties	Number of farms	Average size of farms	Total acreage of farms	Total number of acres occupied by farm buildings, public highways and feed lots	Acreage in pasture	Number bushels of apples harvested	Acreage in crops not otherwise enumerated	Acreage in waste land not utilized for any purpose	Number of silos on farms	Number of tons of silage put up	Number of tractors on farms	Number of automobiles on farms	Number of auto-trucks on farms	Home modern		
														Heat	Bath	Light
Pottawattamie	3,216	161	516,509	25,238	131,563	4,384	917	4,577	151	10,456	298	2,778	543	475	367	396
Poweshiek	2,209	162	356,650	13,280	121,021	15,665	1,118	1,417	324	28,910	226	1,884	175	556	303	320
Ringgold	1,813	169	305,653	12,891	128,510	10,388	507	1,625	226	12,981	53	1,391	19	112	79	119
Sac	1,716	201	345,259	18,879	71,705	1,245	257	690	152	16,656	314	1,957	236	348	299	380
Scott	2,164	125	270,023	10,841	80,688	21,082	1,262	2,677	368	32,821	238	2,032	188	855	281	555
Shelby	2,026	176	357,353	15,961	88,711	6,716	833	2,139	93	9,655	232	2,267	217	329	330	300
Sioux	2,763	168	464,119	23,780	78,030	963	80	975	288	24,007	396	2,726	146	386	229	433
Story	2,251	151	341,321	17,862	65,160	2,299	497	640	419	36,259	345	1,917	108	369	257	400
Tama	2,626	163	429,294	19,398	140,733	16,261	369	4,756	444	45,446	273	2,278	187	486	326	342
Taylor	2,050	150	307,933	15,348	116,982	8,349	299	3,125	231	13,824	72	1,512	50	141	140	159
Union	1,567	160	250,842	10,744	107,267	18,515	721	1,498	164	13,033	56	1,086	36	116	84	114
Van Buren	2,107	138	289,936	7,190	150,959	11,865	664	2,088	189	10,379	69	1,358	44	174	88	98
Wapello	2,142	121	258,835	9,865	111,975	23,973	1,402	5,095	114	7,808	105	1,165	86	194	125	168
Warren	2,329	146	339,264	13,336	135,529	55,621	377	4,982	281	22,348	162	1,520	81	150	117	154
Washington	2,189	147	322,779	13,222	117,149	35,082	314	3,128	201	14,988	259	1,962	192	481	410	477
Wayne	1,794	168	301,118	12,157	116,310	6,022	307	1,388	108	5,328	86	1,267	55	106	84	91
Webster	2,560	166	424,234	19,353	81,142	2,554	609	5,960	204	14,168	578	2,206	101	308	185	217
Winnebago	1,627	154	249,854	14,892	54,133	2,396	898	5,956	273	21,851	167	1,340	56	215	88	88
Winneshiek	2,840	145	417,813	18,575	152,861	14,791	199	6,484	451	36,579	184	2,282	92	596	216	386
Woodbury	2,611	179	472,724	21,625	106,463	6,116	5,430	9,290	231	25,267	233	2,259	246	230	201	256
Worth	1,537	159	243,888	13,216	62,829	4,266	1,919	3,123	269	24,296	219	1,253	36	221	98	104
Wright	1,805	187	337,889	18,065	64,396	1,930	1,928	3,240	195	16,275	371	1,534	92	208	149	151
Grand total	201,371	162	33,071,636	1,498,236	10,035,227	1,157,190	77,250	427,908	27,319	2,295,721	22,319	171,575	10,788	28,845	19,045	25,018

TABLE NO. 2.

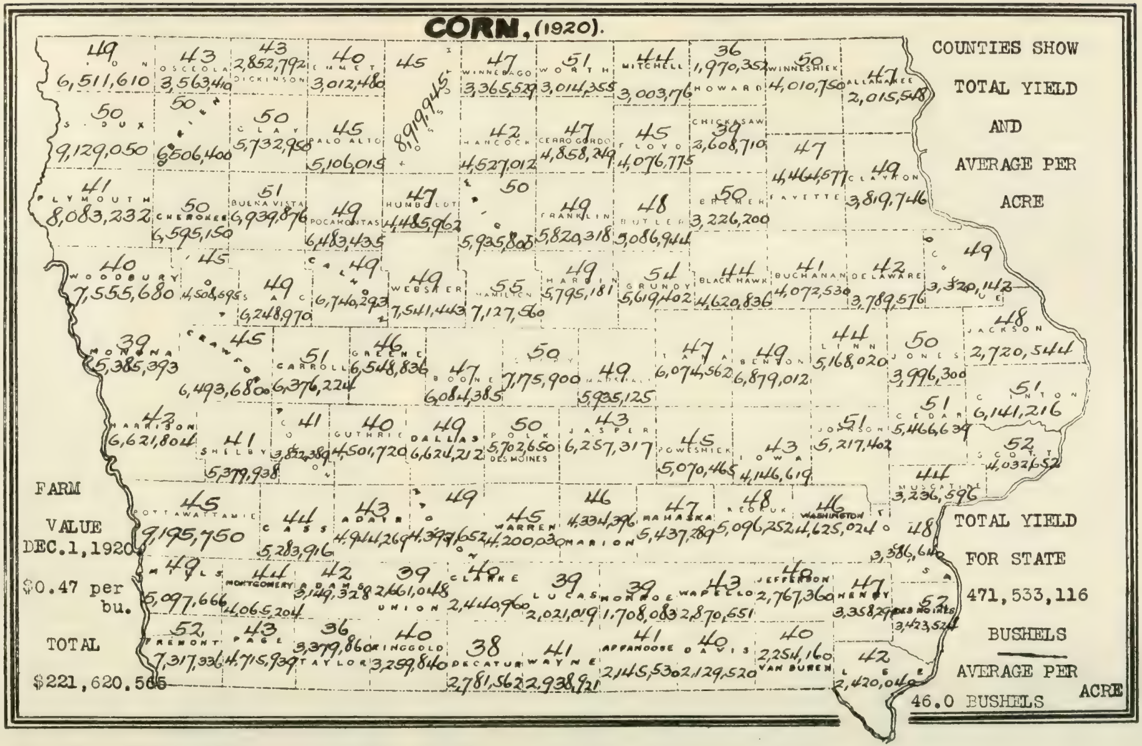
Acreage and average and total yield of corn, oats, winter wheat, spring wheat and barley, by counties, for the year, 1920.

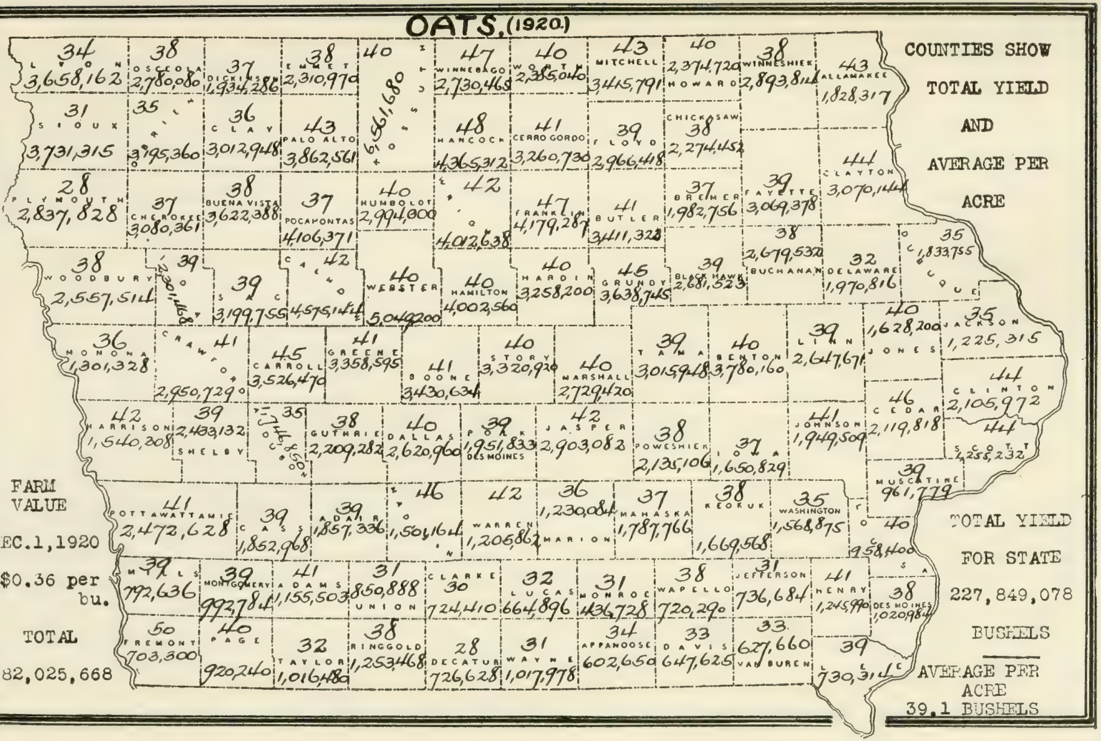
Counties	Corn			Oats			Winter Wheat			Spring Wheat			Barley		
	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels
Adair	114,983	43	4,944,269	47,624	39	1,857,336	3,937	18	70,866	741	9	6,669	6,333	27	170,991
Adams	74,984	42	3,149,328	28,183	41	1,155,503	5,544	17	94,248	175	10	1,750	1,160	29	33,640
Allamakee	42,884	47	2,015,548	42,519	43	1,828,317	1,241	22	27,302	2,476	13	32,188	3,841	30	115,230
Appanoose	52,330	41	2,145,530	17,725	34	602,650	6,026	15	90,390	232	12	2,784	58	30	1,740
Audubon	93,229	41	3,822,389	49,910	35	1,746,850	1,056	20	21,120	2,051	11	22,561	6,506	29	190,734
Benton	140,388	49	6,879,012	94,504	40	3,780,160	683	23	15,709	481	18	8,658	3,959	24	95,016
Black Hawk	105,019	44	4,620,836	68,757	39	2,681,523	363	15	5,445	361	15	5,415	2,139	29	62,031
Boone	129,455	47	6,084,385	83,674	41	3,430,634	659	20	13,180	426	14	5,964	549	30	16,470
Bremer	64,524	50	3,226,200	53,588	37	1,982,756	80	22	1,760	227	13	2,951	667	34	22,678
Buchanan	99,330	41	4,072,530	70,514	38	2,679,532	59	18	1,062	141	14	1,974	1,138	30	34,140
Buena Vista	136,076	51	6,939,876	95,326	38	3,622,388	14	16	224	120	15	1,800	269	29	7,801
Butler	105,978	48	5,086,944	83,203	41	3,411,323	12	19	228	255	11	2,805	481	27	12,987
Calhoun	137,557	49	6,740,293	108,932	42	4,575,144	68	18	1,224	22	13	286	128	30	3,840
Carroll	125,024	51	6,376,224	78,366	45	3,526,470	690	19	13,110	2,819	11	31,009	1,286	28	36,008
Cass	120,089	44	5,283,916	47,512	39	1,852,968	13,636	20	272,720	1,116	11	12,276	8,037	29	233,073
Cedar	107,189	51	5,466,639	46,083	46	2,119,818	2,765	23	63,595	685	15	10,275	7,389	27	199,503
Cerro Gordo	103.367	47	4,858,249	79,530	41	3,260,730	66	19	1,254	285	12	3,420	781	26	20,306
Cherokee	131,903	50	6,595,150	83,253	37	3,080,361	--------	------	----------	36	9	324	662	32	21,184
Chickasaw	66,890	39	2,608,710	59,854	38	2,274,452	117	10	1,170	1,069	10	10,690	662	27	17,874
Clarke	61,024	40	2,440,960	24,147	30	724,410	5,900	12	70,800	16	13	208	87	32	2,784
Clay	114,659	50	5,732,950	83,693	36	3,012,948	54	21	1,134	148	10	1,480	559	28	15,652
Clayton	77,954	49	3,819,746	69,776	44	3,070,144	1,628	22	35,816	1,671	14	23,394	4,891	25	122,275
Clinton	120,416	51	6,141,216	47,863	44	2,105,972	3,893	20	77,860	5,493	15	82,395	6,289	22	138,358
Crawford	144,304	45	6,493,680	71,969	41	2,950,729	1,757	22	38,654	9,077	11	99,847	2,869	29	83,201
Dallas	135,188	49	6,624,212	65,524	40	2,620,960	10,450	22	229,900	129	12	1,548	606	29	17,574
Davis	53,238	40	2,129,520	19,625	33	647,625	5,037	16	80,592	89	14	1,246	24	35	840
Decatur	73,199	38	2,781,562	25,951	28	726,628	10,676	14	149,464	46	14	644	21	27	567
Delaware	90,228	42	3,789,576	61,588	32	1,970,816	115	17	1,955	372	16	5,952	2,810	23	64,630
Des Moines	65,837	52	3,423,524	26,868	38	1,020,984	10,271	22	225,962	227	14	3,178	290	35	10,150
Dickinson	66,344	43	2,852,792	52,278	37	1,934,286	36	21	756	444	9	3,996	1,030	24	24,720
Dubuque	67,758	49	3,320,142	52,393	35	1,833,755	601	15	9,015	2,188	17	37,196	1,540	24	36,960

TABLE NO. 2—Continued.

Counties	Corn			Oats			Winter Wheat			Spring Wheat			Barley		
	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels
Emmet	75,312	40	3,012,480	60,815	38	2,310,970	28	21	588	18	12	216	479	24	11,496
Fayette	94,991	47	4,464,577	78,702	39	3,069,378	319	23	7,337	1,080	12	12,960	3,625	30	108,750
Floyd	90,595	45	4,076,775	76,062	39	2,966,418	49	16	784	328	9	2,952	659	27	17,793
Franklin	118,782	49	5,820,318	88,921	47	4,179,287	12	19	228	168	13	2,184	522	30	15,660
Fremont	140,718	52	7,317,336	14,066	50	703,300	21,263	25	531.575	166	15	2,490	184	40	7,360
Greene	142,366	46	6,548,836	81,917	41	3,358,597	375	20	7,500	102	9	918	276	30	8,280
Grundy	104,063	54	5,619,402	80,861	45	3,638,745	168	24	4,032	80	13	1,040	934	25	23,350
Guthrie	112,543	40	4,501,720	58,139	38	2,209,282	1,940	17	32,980	1,067	13	13,871	1,627	30	48,810
Hamilton	129,592	55	7,127,560	100,064	40	4,002,560	99	30	2,970	244	13	3,172	438	27	11,826
Hancock	107,786	42	4,527,012	90,944	48	4,365,312	16	17	272	660	11	7,260	996	28	27,888
Hardin	118,269	49	5,795,181	81,455	40	3,258,200	183	22	4,026	168	14	2,352	765	31	23,715
Harrison	157,662	42	6,621,804	36,674	42	1,540,308	18,134	26	471,484	15,919	12	191,028	2,255	35	78,925
Henry	71,453	47	3,358,291	30,390	41	1,245,990	3,701	19	70,319	125	12	1,500	142	24	3,408
Howard	54,732	36	1,970,352	59,368	40	2,374,720	91	10	910	917	9	8,253	1,913	30	57,390
Humboldt	95,446	47	4,485,962	74,850	40	2,994,000	130	20	2,600	101	15	1,515	1,059	31	32,829
Ida	100,191	45	4,508,595	59,012	39	2,301,468	62	15	930	455	9	4,095	1,751	28	49,028
Iowa	96,433	43	4,146,619	44,617	37	1,650,829	1,488	22	32,736	674	14	9,436	900	23	20,700
Jackson	56,678	48	2,720,544	35,009	35	1,225,315	1,733	22	38,126	1,966	17	33,422	1,119	29	32,451
Jasper	145,519	43	6,257,317	69,121	42	2,903,082	5,295	21	111,195	1,872	13	24,336	186	37	6,882
Jefferson	69,184	40	2,767,360	23,764	31	736,684	4,878	16	78,048	74	5	370	81	25	2,025
Johnson	102,302	51	5.217,402	47,549	41	1,949,509	1,921	23	44,183	446	18	8,028	666	27	17,982
Jones	79,926	50	3,996,300	40,705	40	1,628,200	320	22	7,040	511	16	8,176	2,518	29	73,022
Keokuk	106,174	48	5,096,252	43,936	38	1,669,568	2,684	21	56,364	1,121	10	11,210	383	22	8,426
Kossuth	198,221	45	8,919,945	164,042	40	6,561,680	77	23	1,771	134	15	2,010	1,922	30	57,660
Lee	57,620	42	2,420,040	18,726	39	730,314	14,630	16	234,080	195	13	2,535	188	27	5,076
Linn	117,455	44	5,168,020	67,889	39	2,647,671	426	20	8,520	395	13	5,135	928	24	22,272
Louisa	70,555	48	3,386,640	23,960	40	958,400	10,959	22	241,098	137	14	1,918	399	32	12,768
Lucas	51,821	39	2,021,019	20,778	32	664,896	7,397	14	103,558	63	16	1,008	--------	-----	---------
Lyon	132,890	49	6,511,610	107,593	34	3,658,162	36	12	432	434	10	4,340	2,610	28	73,080
Madison	89,748	49	4,397,652	32,634	46	1,501,164	14,821	19	281,599	296	11	3,256	2,004	31	62,124
Mahaska	115,687	47	5,437,289	48,318	37	1,787,766	5,854	23	134,642	633	15	9,495	283	20	5,660
Marion	94,226	46	4,334,396	34,169	36	1,230,084	15,403	18	277,254	1,971	15	29,565	536	36	19,296

Marshall	121,125	49	5,935,125	68,238	40	2,729,520	1,178	23	27,094	460	18	8,280	374	33	12,342
Mills	104,034	49	5,097,666	20,324	39	792,636	14,878	19	282,682	987	12	11,844	611	30	18,330
Mitchell	68,254	44	3,003,176	79,437	43	3,415,791	40	19	760	462	9	4,158	954	29	27,666
Monona	138,087	39	5,385,393	36,148	36	1,301,328	28,174	20	563,480	15,147	8	121,176	1,138	25	28,450
Monroe	43,797	39	1,708,083	14,088	31	436,728	9,791	17	166,447	539	11	5,929	115	30	3,450
Montgomery	92,391	44	4,065,204	25,456	39	992,784	15,496	19	294,424	463	9	4,167	1,208	31	37,448
Muscatine	73,559	44	3,236,596	24,661	39	961,779	6,162	20	123,240	663	14	9,282	2,432	28	68,096
O'Brien	130,128	50	6,506,400	91,296	35	3,195,366	27	20	540	110	9	990	2,409	26	62,634
Osceola	82,870	43	3,563,410	73,160	38	2,780,080	30	16	480	34	9	306	689	27	18,603
Page	109,673	43	4,715,939	23,006	40	920,240	24,495	22	538,890	200	14	2,800	377	21	7,917
Palo Alto	113,467	45	5,106,015	89,827	43	3,862,561	21	20	420	51	13	663	533	27	14,391
Plymouth	197,152	41	8,083,232	101,351	28	2,837,828	998	18	17,964	22,920	8	183,360	4,034	20	80,680
Pocahontas	132,315	49	6,483,435	110,983	37	4,106,371	14	18	252	108	16	1,728	395	30	11,850
Polk	114,053	50	5,702,650	50,047	39	1,951,833	16,682	23	383,686	1,830	13	23,790	136	33	4,488
Pottawattamie	204,350	45	9,195,750	60,308	41	2,472,628	17,293	25	432,325	3,548	14	49,672	9,458	30	283,740
Poweshiek	112,677	45	5,070,465	56,187	38	2,135,106	539	21	11,319	556	15	8,340	424	25	10,600
Ringgold	81,496	40	3,259,840	32,986	38	1,253,468	4,515	12	54,180	100	11	1,100	228	25	5,700
Sac	127,530	49	6,248,970	82,045	39	3,199,755	112	20	2,240	73	14	1,022	2,225	39	86,775
Scott	77,551	52	4,032,652	28,528	44	1,255,232	14,011	21	294,231	2,150	17	36,550	15,127	23	347,921
Shelby	131,218	41	5,379,938	62,388	39	2,433,132	741	22	16,302	3,215	13	41,795	7,693	30	230,790
Sioux	182,581	50	9,129,050	120,365	31	3,731,315	883	17	15,011	4,708	8	37,664	7,543	25	188,575
Story	143,518	50	7,175,900	83,023	40	3,320,920	478	20	9,560	52	17	884	58	35	2,030
Tama	129,246	47	6,074,562	77,332	39	3,015,948	763	23	17,549	1,623	18	29,214	1,995	29	57,855
Taylor	93,885	36	3,379,860	31,765	32	1,016,480	9,704	21	203,784	125	10	1,250	317	25	7,925
Union	68,232	39	2,661,048	27,448	31	850,888	2,526	15	37,890	88	10	880	746	24	17,904
Van Buren	56,354	40	2,254,160	19,020	33	627,660	6,119	19	116,261	83	16	1,328	88	29	2,552
Wapello	66,757	43	2,870,551	18,955	38	720,290	10,420	19	197,980	159	12	1,908	125	30	3,750
Warren	93,334	45	4,200,030	28,711	42	1,205,862	28,119	18	506,142	326	13	4,238	375	35	13,125
Washington	100,544	46	4,625,024	44,825	35	1,568,875	2,079	21	43,659	165	13	2,145	69	25	1,725
Wayne	71,681	41	2,938,921	32,838	31	1,017,978	4,862	12	58,344	24	17	408	57	28	1,596
Webster	153,907	49	7,541,443	126,230	40	5,049,200	202	20	4,040	1,357	10	13,570	540	30	16,200
Winnebago	71,607	47	3,365,529	58,095	47	2,730,465	43	20	860	1,695	11	18,645	1,730	22	38,060
Winneshiek	80,215	50	4,010,750	76,153	38	2,893,814	523	19	9,937	4,578	10	45,780	8,695	27	234,765
Woodbury	188,892	40	7,555,680	67,303	38	2,557,514	8,235	21	172,935	6,944	7	48,608	1,495	28	41,860
Worth	59,105	51	3,014,355	59,626	40	2,385,040	79	21	1,659	1,714	9	15,426	1,148	30	34,440
Wright	118,716	50	5,935,800	95,539	42	4,012,638	42	19	798	296	15	4,440	741	36	26,676
Grand total	10,254,589	46.0	471,533,116	5,833,474	39.1	227,849,078	452,200	19.8	8,953,061	143,691	11.0	1,578,269	175,691	27.4	4,809,798


CORN, (1920).
COUNTIES SHOW
TOTAL YIELD
AND
AVERAGE PER
ACRE
LYON 49 6,511,610
OSCEOLA 43 3,563,410
DICKINSON 43 2,852,792
EMMET 40 3,012,480
KOSSUTH 45 8,919,945
WINNEBAGO 47 3,365,529
WORTH 51 3,014,355
MITCHELL 44 3,003,176
HOWARD 36 1,970,352
WINNESHIEK 50 4,010,750
ALLAMAKEE 47 2,015,548
SIOUX 50 9,129,050
O'BRIEN 50 8,506,400
CLAY 50 5,732,958
PALO ALTO 45 5,106,015
HANCOCK 42 4,527,012
CERRO GORDO 47 4,858,249
FLOYD 45 4,076,775
CHICKASAW 39 2,608,710
FAYETTE 47 4,464,577
CLAYTON 49 3,819,746
PLYMOUTH 41 8,083,232
CHEROKEE 50 6,595,150
BUENA VISTA 51 6,939,876
POCAHONTAS 49 6,483,435
HUMBOLDT 47 4,485,962
WRIGHT 50 5,935,800
FRANKLIN 49 5,820,318
BUTLER 48 5,086,944
BREMER 50 3,226,200
WOODBURY 40 7,555,680
IDA 45 4,508,695
SAC 49 6,248,970
CALHOUN 49 6,740,293
WEBSTER 49 7,541,443
HAMILTON 55 7,127,560
HARDIN 49 5,795,181
GRUNDY 54 5,619,402
BLACK HAWK 44 4,620,836
BUCHANAN 41 4,072,530
DELAWARE 42 3,789,576
DUBUQUE 49 3,320,142
MONONA 39 5,385,393
CRAWFORD 45 6,493,680
CARROLL 51 6,376,224
GREENE 46 6,548,836
BOONE 47 6,084,385
STORY 50 7,175,900
MARSHALL 49 5,935,125
TAMA 47 6,074,562
BENTON 49 6,879,012
LINN 44 5,168,020
JONES 50 3,996,300
JACKSON 48 2,720,544
HARRISON 43 6,621,804
SHELBY 41 5,379,938
AUDUBON 41 3,822,389
GUTHRIE 40 4,501,720
DALLAS 49 6,624,212
POLK 50 5,702,650
DES MOINES
JASPER 43 6,257,317
POWESHIEK 45 5,070,465
IOWA 43 4,146,619
JOHNSON 51 5,217,402
CEDAR 51 5,466,639
CLINTON 51 6,141,216
SCOTT 52 4,032,652
MUSCATINE 44 3,236,596
POTTAWATTAMIE 45 9,195,750
CASS 44 5,283,916
ADAIR 43 4,944,269
MADISON 49 4,397,652
WARREN 45 4,200,030
MARION 46 4,334,396
MAHASKA 47 5,437,289
KEOKUK 48 5,096,252
WASHINGTON 46 4,625,024
LOUISA 48 3,386,640
MILLS 49 5,097,666
MONTGOMERY 44 4,065,204
ADAMS 42 3,149,328
UNION 39 2,661,048
CLARKE 40 2,440,960
LUCAS 39 2,021,019
MONROE 39 1,708,083
WAPELLO 43 2,870,651
JEFFERSON 40 2,767,360
HENRY 47 3,358,290
DES MOINES 52 3,423,524
FREMONT 52 7,317,336
PAGE 43 4,715,939
TAYLOR 36 3,379,860
RINGGOLD 40 3,259,840
DECATUR 38 2,781,562
WAYNE 41 2,938,921
APPANOOSE 41 2,145,530
DAVIS 40 2,129,520
VAN BUREN 40 2,254,160
LEE 42 2,420,040
FARM
VALUE
DEC.1,1920
$0.47 per bu.
TOTAL
$221,620.565
TOTAL YIELD
FOR STATE
471,533,116
BUSHELS
AVERAGE PER
ACRE
46.0 BUSHELS

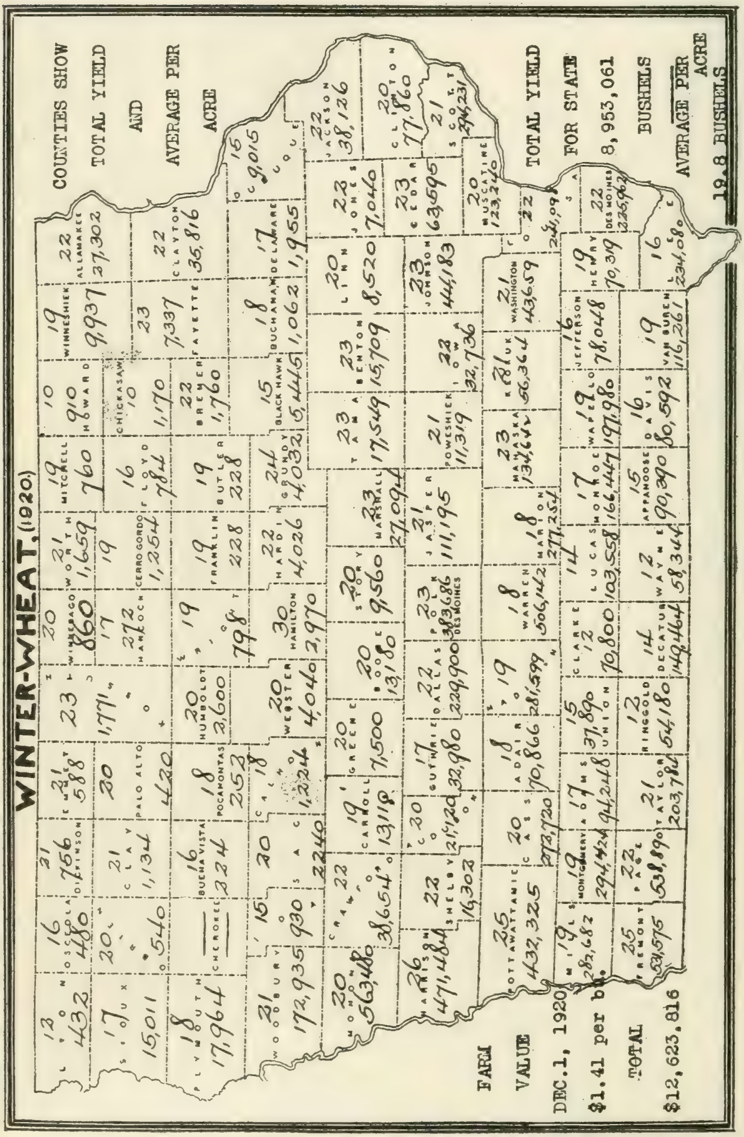

OATS, (1920.)
LYON 34 3,658,162
OSCEOLA 38 2,780,080
DICKINSON 37 1,934,286
EMMET 38 2,310,970
KOSSUTH 40 6,561,680
WINNEBAGO 47 2,730,465
WORTH 40 2,385,040
MITCHELL 43 3,415,791
HOWARD 40 2,374,720
WINNESHIEK 38 2,893,814
ALLAMAKEE 43 1,828,317
SIOUX 31 3,731,315
O'BRIEN 35 3,795,360
CLAY 36 3,012,948
PALO ALTO 43 3,862,561
HANCOCK 48 4,365,312
CERRO GORDO 41 3,260,730
FLOYD 39 2,966,418
CHICKASAW 38 2,274,452
CLAYTON 44 3,070,144
PLYMOUTH 28 2,837,828
CHEROKEE 37 3,080,361
BUENA VISTA 38 3,622,388
POCAHONTAS 37 4,106,371
HUMBOLDT 40 2,994,800
WRIGHT 42 4,012,638
FRANKLIN 47 4,179,287
BUTLER 41 3,411,323
BREMER 37 1,982,756
FAYETTE 39 3,069,378
WOODBURY 38 2,557,514
IDA 39 2,301,460
SAC 39 3,199,755
CALHOUN 42 4,575,144
WEBSTER 40 5,049,200
HAMILTON 40 4,002,560
HARDIN 40 3,258,200
GRUNDY 45 3,638,745
BLACK HAWK 39 2,681,523
BUCHANAN 38 2,679,532
DELAWARE 32 1,970,816
DUBUQUE 35 1,833,755
MONONA 36 1,301,328
CRAWFORD 41 2,950,729
CARROLL 45 3,526,470
GREENE 41 3,358,595
BOONE 41 3,430,634
STORY 40 3,320,920
MARSHALL 40 2,729,420
TAMA 39 3,015,948
BENTON 40 3,780,160
LINN 39 2,647,671
JONES 40 1,628,200
JACKSON 35 1,225,315
HARRISON 42 1,540,208
SHELBY 39 2,433,132
AUDUBON 35 [illegible]
GUTHRIE 38 2,209,282
DALLAS 40 2,620,960
POLK 39 1,951,833
DES MOINES
JASPER 42 2,903,082
POWESHIEK 38 2,135,106
IOWA 37 1,650,829
JOHNSON 41 1,949,509
CEDAR 46 2,119,818
CLINTON 44 2,105,972
SCOTT 44 2,255,232
MUSCATINE 39 961,779
POTTAWATTAMIE 41 2,472,628
CASS 39 1,852,968
ADAIR 39 1,857,336
MADISON 46 1,501,164
WARREN 42 1,206,862
MARION 36 1,230,084
MAHASKA 37 1,787,766
KEOKUK 38 1,669,568
WASHINGTON 35 1,568,875
LOUISA 40 958,400
MILLS 39 792,636
MONTGOMERY 39 992,784
ADAMS 41 1,155,503
UNION 31 850,888
CLARKE 30 724,410
LUCAS 32 664,896
MONROE 31 436,728
WAPELLO 38 720,290
JEFFERSON 31 736,684
HENRY 41 1,245,990
DES MOINES 38 1,020,984
FREMONT 50 703,300
PAGE 40 920,240
TAYLOR 32 1,016,480
RINGGOLD 38 1,253,468
DECATUR 28 726,628
WAYNE 31 1,017,978
APPANOOSE 34 602,650
DAVIS 33 647,625
VAN BUREN 33 627,660
LEE 39 730,314

COUNTIES SHOW
TOTAL YIELD
AND
AVERAGE PER
ACRE

FARM
VALUE
DEC.1,1920
$0.36 per
bu.
TOTAL
$82,025,668

TOTAL YIELD
FOR STATE
227,849,078
BUSHELS

AVERAGE PER
ACRE
39.1 BUSHELS



WINTER-WHEAT (1920)

COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE

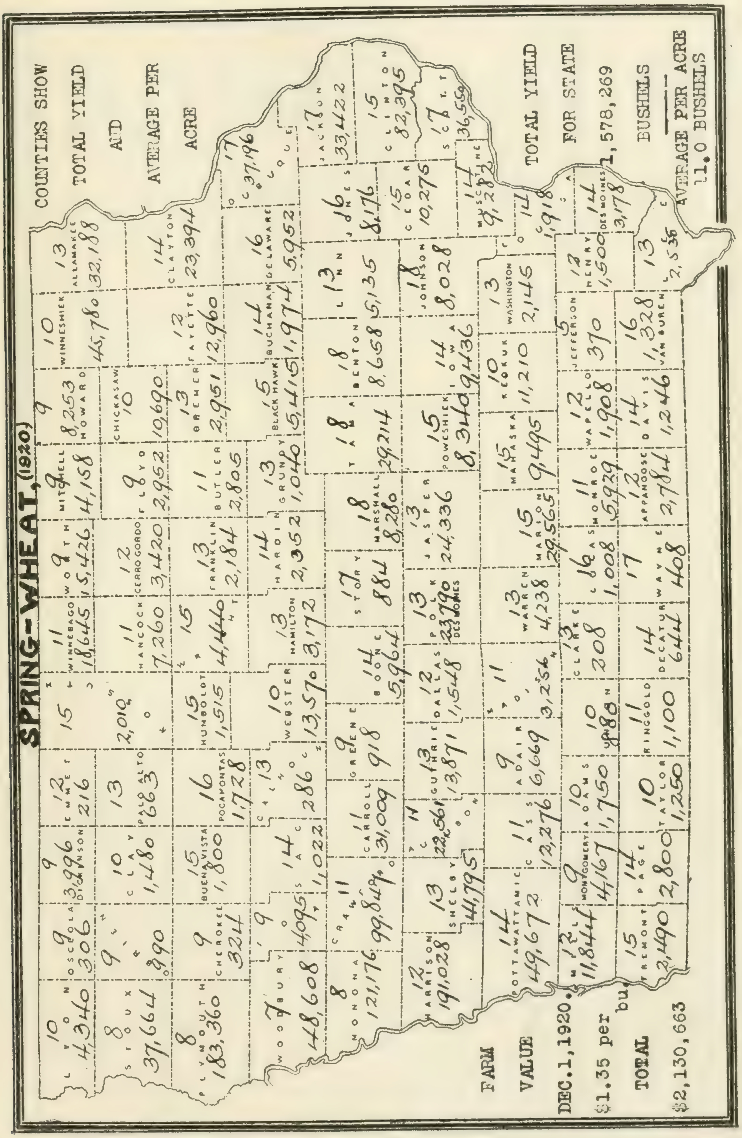
TOTAL YIELD FOR STATE 8,953,061 BUSHELS

AVERAGE PER ACRE 19.8 BUSHELS

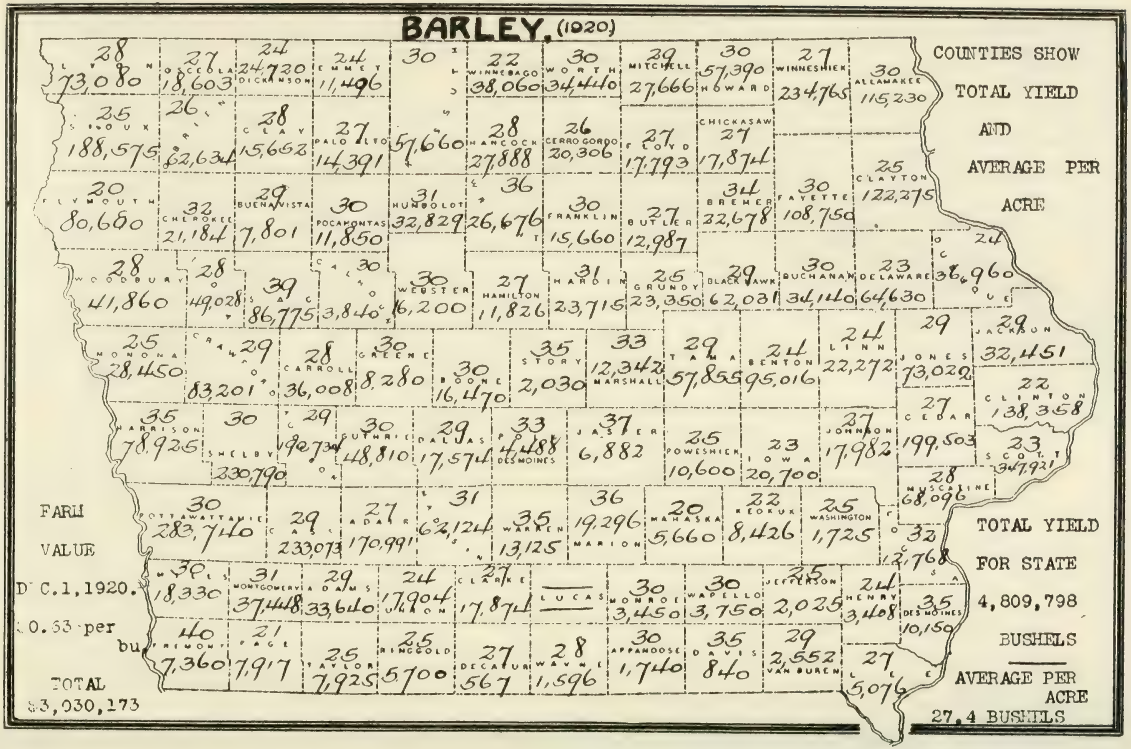
FARM VALUE DEC. 1, 1920 $1.41 per bu.

TOTAL $12,623,816

LYON 13 432
OSCEOLA 16 480
DICKINSON 21 756
EMMET 21 588
KOSSUTH 23 1,771
WINNEBAGO 20 860
WORTH 21 1,659
MITCHELL 19 760
HOWARD 10 910
WINNESHIEK 19 9937
ALLAMAKEE 22 37,302
SIOUX 17 15,011
O'BRIEN 20 540
CLAY 21 1,134
PALO ALTO 20 420
HANCOCK 17 272
CERRO GORDO 19 1,254
FLOYD 16 784
CHICKASAW 10 1,170
FAYETTE 23 7,337
CLAYTON 22 35,816
PLYMOUTH 18 17,964
CHEROKEE —
BUENA VISTA 16 324
POCAHONTAS 18 252
HUMBOLDT 20 2,600
WRIGHT 19 798
FRANKLIN 19 228
BUTLER 19 228
BREMER 22 1,760
BUCHANAN 18 1,062
DELAWARE 17 1,955
DUBUQUE 16 9,015
WOODBURY 21 172,935
IDA 15 930
SAC 20 2240
CALHOUN 18 1,224
WEBSTER 20 4,040
HAMILTON 30 2,970
HARDIN 22 4,026
GRUNDY 24 4,032
BLACK HAWK 15 5,445
BENTON 23 15,709
LINN 20 8,520
JONES 22 7,040
JACKSON 22 38,126
MONONA 20 56,480
CRAWFORD 22 38,654
CARROLL 19 1311
GREENE 20 7,500
BOONE 20 13,180
STORY 20 9,560
MARSHALL 23 27,094
TAMA 23 17,549
CEDAR 23 63,595
CLINTON 20 77,860
HARRISON 26 471,484
SHELBY 22 16,302
AUDUBON 20 21,420
GUTHRIE 17 32,980
DALLAS 22 229,900
POLK 23 383,686
DES MOINES
JASPER 21 111,195
POWESHIEK 21 11,319
IOWA 22 32,736
JOHNSON 23 44,183
MUSCATINE 20 123,240
SCOTT 21 294,231
POTTAWATTAMIE 25 432,325
CASS 20 273,720
ADAIR 18 70,866
MADISON 19 281,599
WARREN 18 506,142
MARION 18 277,254
MAHASKA 23 134,642
KEOKUK 21 56,364
WASHINGTON 21 43,659
LOUISA 22 241,098
MILLS 19 282,682
MONTGOMERY 19 294,424
ADAMS 17 94,248
UNION 15 37,890
CLARKE 12 70,800
LUCAS 14 103,558
MONROE 17 166,447
WAPELLO 19 197,980
JEFFERSON 16 78,048
HENRY 19 70,319
DES MOINES 22 335,962
FREMONT 25 53,575
PAGE 22 538,890
TAYLOR 21 203,782
RINGGOLD 12 54,180
DECATUR 14 149,464
WAYNE 12 58,344
APPANOOSE 15 90,390
DAVIS 16 80,592
VAN BUREN 19 116,261
LEE 16 234,080


SPRING-WHEAT (1920)
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
TOTAL YIELD FOR STATE 1,578,269 BUSHELS
AVERAGE PER ACRE 11.0 BUSHELS
FARM VALUE DEC.1,1920. $1.35 per bu. TOTAL $2,130,663
LYON 10 4,340
OSCEOLA 9 306
DICKINSON 9 3,996
EMMET 12 216
KOSSUTH 15 2,010
WINNEBAGO 11 18,645
WORTH 9 5,426
MITCHELL 9 4,158
HOWARD 9 8,253
WINNESHIEK 10 45,780
ALLAMAKEE 13 32,188
SIOUX 8 37,664
O'BRIEN 9 890
CLAY 10 1,480
PALO ALTO 13 663
HANCOCK 11 7,260
CERRO GORDO 12 3,420
FLOYD 9 2,952
CHICKASAW 10 10,690
FAYETTE 12 12,960
CLAYTON 14 23,394
PLYMOUTH 8 183,360
CHEROKEE 9 324
BUENA VISTA 15 1,800
POCAHONTAS 16 1,728
HUMBOLDT 15 1,515
WRIGHT 15 4,440
FRANKLIN 13 2,184
BUTLER 11 2,805
BREMER 13 2,951
BUCHANAN 14 1,974
DELAWARE 16 5,952
DUBUQUE 17 37,196
WOODBURY 7 48,608
IDA 9 4,095
SAC 14 1,022
CALHOUN 13 286
WEBSTER 10 13,570
HAMILTON 13 3,172
HARDIN 14 2,352
GRUNDY 13 1,040
BLACK HAWK 15 5,415
TAMA 18 29,214
BENTON 18 8,658
LINN 13 5,135
JONES 16 8,176
JACKSON 17 33,422
MONONA 8 121,176
CRAWFORD 11 99,849
CARROLL 11 31,009
GREENE 9 918
BOONE 14 5,964
STORY 17 884
MARSHALL 18 8,280
IOWA 14 9,436
JOHNSON 18 8,028
CEDAR 15 10,275
CLINTON 15 82,395
SCOTT 17 36,559
HARRISON 12 191,028
SHELBY 13 44,795
AUDUBON 11 22,561
GUTHRIE 13 13,871
DALLAS 12 1,548
POLK 13 23,790
DES MOINES
JASPER 13 24,336
POWESHIEK 15 8,340
MUSCATINE 14 9,282
POTTAWATTAMIE 14 49,672
CASS 11 12,276
ADAIR 9 6,669
MADISON 11 3,256
WARREN 13 4,238
MARION 15 29,565
MAHASKA 15 9,495
KEOKUK 10 11,210
WASHINGTON 13 2,145
LOUISA 14 1,918
MILLS 12 11,844
MONTGOMERY 9 4,167
ADAMS 10 1,750
UNION 10 880
CLARKE 13 208
LUCAS 16 1,008
MONROE 11 5,929
WAPELLO 12 1,908
JEFFERSON 5 370
HENRY 12 1,500
DES MOINES 14 3,178
FREMONT 15 2,490
PAGE 14 2,800
TAYLOR 10 1,250
RINGGOLD 11 1,100
DECATUR 14 6,444
WAYNE 17 408
APPANOOSE 12 2,784
DAVIS 14 1,246
VAN BUREN 16 1,328
LEE 13 2,556

BARLEY. (1020)


LYON 28 73,080
OSCEOLA 27 18,603
DICKINSON 24 24,720
EMMET 24 11,496
30 57,660
WINNEBAGO 22 38,060
WORTH 30 34,440
MITCHELL 29 27,666
HOWARD 30 57,390
WINNESHIEK 27 234,765
ALLAMAKEE 30 115,230
SIOUX 25 188,575
26 62,634
CLAY 28 15,662
PALO ALTO 27 14,391
HANCOCK 28 27,888
CERRO GORDO 26 20,306
FLOYD 27 17,793
CHICKASAW 27 17,874
CLAYTON 25 122,275
PLYMOUTH 20 80,680
CHEROKEE 32 21,184
BUENA VISTA 29 7,801
POCAHONTAS 30 11,850
HUMBOLDT 31 32,829
36 26,676
FRANKLIN 30 15,660
BUTLER 27 12,987
BREMER 34 22,678
FAYETTE 30 108,750
WOODBURY 28 41,860
28 49,028
SAC 39 86,775
30 3,840
WEBSTER 30 6,200
HAMILTON 27 11,826
HARDIN 31 23,715
GRUNDY 25 23,350
BLACK HAWK 29 62,031
BUCHANAN 30 34,140
DELAWARE 23 64,630
24 36,960
MONONA 25 28,450
29 83,201
CARROLL 28 36,008
GREENE 30 8,280
BOONE 30 16,470
STORY 35 2,030
MARSHALL 33 12,342
TAMA 29 57,855
BENTON 24 95,016
LINN 24 22,272
JONES 29 73,020
JACKSON 29 32,451
CLINTON 22 138,358
HARRISON 35 78,925
SHELBY 30 230,790
29 192,734
GUTHRIE 30 48,810
DALLAS 29 17,574
DES MOINES 33 4,488
JASPER 37 6,882
POWESHIEK 25 10,600
IOWA 23 20,700
JOHNSON 27 17,982
CEDAR 27 199,503
SCOTT 23 347,921
MUSCATINE 28 68,096
POTTAWATTAMIE 30 283,740
CASS 29 233,073
ADAIR 27 170,991
31 62,124
WARREN 35 13,125
MARION 36 19,296
MAHASKA 20 5,660
KEOKUK 22 8,426
WASHINGTON 25 1,725
32 12,768
30 18,330
MONTGOMERY 31 37,448
ADAMS 29 33,640
UNION 24 17,904
CLARKE 27 17,874
LUCAS
MONROE 30 3,450
WAPELLO 30 3,750
JEFFERSON 25 2,025
HENRY 24 3,408
DES MOINES 35 10,150
FREMONT 40 7,360
PAGE 21 7,917
TAYLOR 25 7,925
RINGGOLD 25 5700
DECATUR 27 567
WAYNE 28 1,596
APPANOOSE 30 1,740
DAVIS 35 840
VAN BUREN 29 2,552
27 5,076

COUNTIES SHOW
TOTAL YIELD
AND
AVERAGE PER
ACRE

TOTAL YIELD
FOR STATE
4,809,798
BUSHELS

AVERAGE PER
ACRE
27.4 BUSHELS

FARM
VALUE
DEC.1,1920.
$0.53 per
bu.
TOTAL
$3,030,173

TABLE NO. 3.

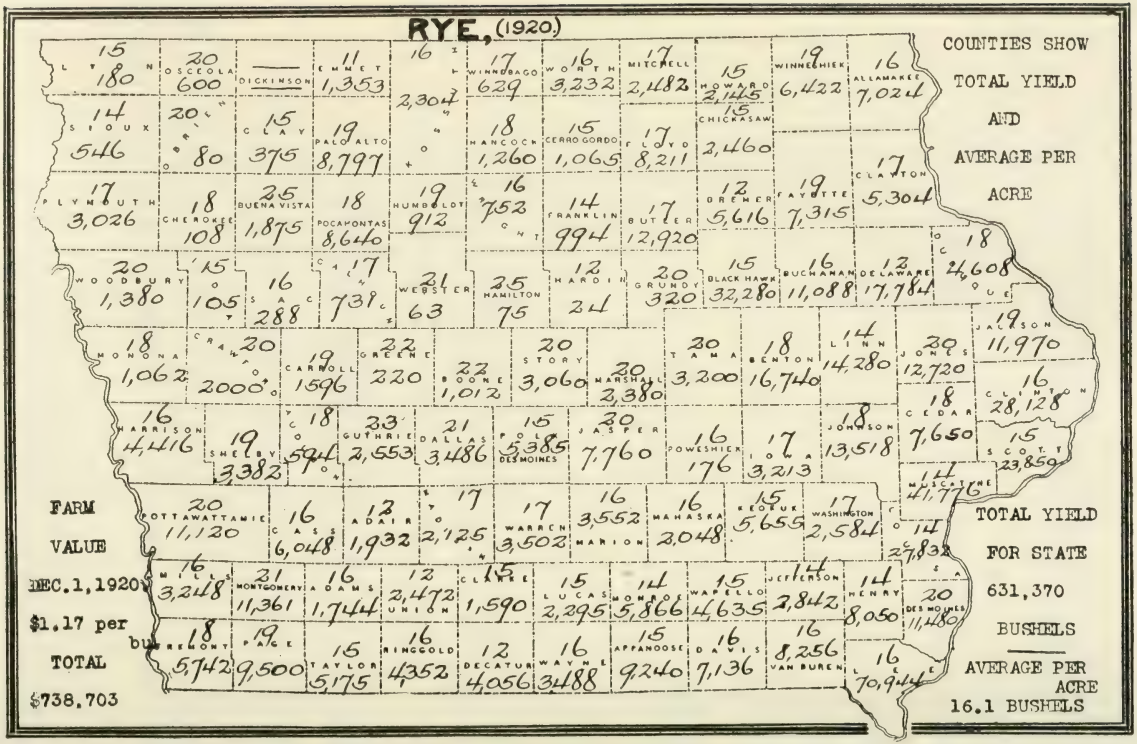
Acreage and average and total yield of rye, tame hay, wild hay, alfalfa and potatoes, and acreage and total yield of alfalfa and flax seed, by counties, for the year 1920.

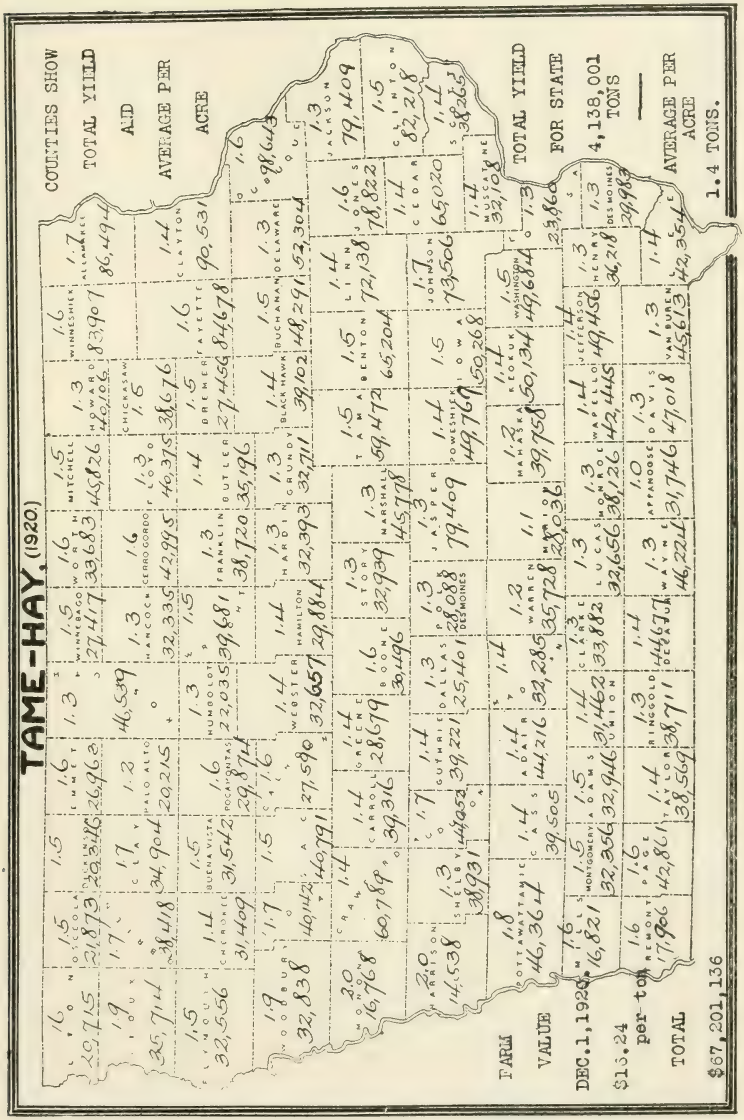
Counties	Rye			Hay (tame)			Hay (wild)			Alfalfa			Potatoes			Flax Seed	
	Acres	Bushels per acre	Total bushels	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Bushels per acre	Total bushels	Acres	Total bushels
Adair	161	12	1,932	31,583	1.4	44,216	2,397	2.0	4,794	285	1.0	285	464	79	36,656	--------	--------
Adams	109	16	1,744	21,964	1.5	32,946	1,704	1.6	2,726	669	2.8	1,873	295	78	23,010	--------	--------
Allamakee	439	16	7,024	50,879	1.7	86,494	1,316	2.1	2,764	13	2.3	30	872	139	121,208	26	364
Appanoose	616	15	9,240	31,746	1.0	31,746	1,061	1.1	1,167	85	3.5	298	166	79	13,114	--------	--------
Audubon	33	18	594	25,913	1.7	44,052	1,252	2.0	2,504	1,814	3.5	6,349	559	101	56,459	--------	--------
Benton	930	18	16,740	43,469	1.5	65,204	2,115	1.5	3,172	104	4.0	416	691	110	76,010	--------	--------
Black Hawk	2,152	15	32,280	27,930	1.4	39,102	7,686	1.2	9,223	525	3.0	1,575	800	120	96,000	1	10
Boone	46	22	1,012	19,060	1.6	30,496	5,470	1.0	5,470	791	2.5	1,978	112	137	15,344	--------	--------
Bremer	468	12	5,616	18,304	1.5	27,456	18,896	1.3	24,565	61	3.0	183	1,227	125	153,375	15	150
Buchanan	693	16	11,088	32,194	1.5	48,291	10,996	1.5	16,494	85	3.0	255	528	96	50,688	--------	--------
Buena Vista	75	25	1,875	21,028	1.5	31,542	6,630	1.5	9,945	839	3.2	2,685	812	123	99,876	70	700
Butler	760	17	12,920	25,140	1.4	35,196	11,795	1.2	14,154	23	2.8	64	1,013	99	100,287	20	200
Calhoun	43	17	731	17,244	1.6	27,590	2,629	1.1	2,892	434	3.0	1,302	376	114	42,864	36	360
Carroll	84	19	1,596	28,083	1.4	39,316	7,020	1.3	9,126	498	2.7	1,345	1,352	101	136,552	55	550
Cass	378	16	6,048	28,218	1.4	39,505	949	1.4	1,329	988	2.8	2,766	473	120	56,760	--------	--------
Cedar	425	18	7,650	46,443	1.4	65,020	103	1.2	124	73	3.0	219	504	100	50,400	--------	--------
Cerro Gordo	71	15	1,065	26,872	1.6	42,995	11,134	1.1	12,247	60	3.0	180	1,058	155	163,990	304	3,040
Cherokee	6	18	108	22,435	1.4	31,409	7,460	1.3	9,698	2,701	3.0	8,103	721	145	104,545	6	60
Chickasaw	164	15	2,460	25,784	1.5	38,676	15,447	1.0	15,447	2	3.2	6	572	97	55,484	254	2,032
Clarke	106	15	1,590	26,063	1.3	33,882	184	1.0	184	20	3.0	60	64	76	4,864	--------	--------
Clay	25	15	375	20,532	1.7	34,904	11,215	1.2	13,458	455	2.4	1,092	454	124	56,296	252	3,024
Clayton	312	17	5,304	64,665	1.4	90,531	1,211	1.0	1,211	68	3.0	204	1,710	150	256,500	--------	--------
Clinton	1,758	16	28,128	54,812	1.5	82,218	1,712	1.0	1,712	248	4.0	992	288	70	20,160	--------	--------
Crawford	100	20	2,000	43,421	1.4	60,789	4,740	1.5	7,110	7,560	3.1	23,436	1,166	122	142,252	--------	--------
Dallas	166	21	3,486	19,539	1.3	25,401	2,030	1.4	2,842	616	3.1	1,910	88	123	10,824	12	120
Davis	446	16	7,136	36,168	1.3	47,018	16	1.0	16	43	2.8	120	286	86	24,596	--------	--------
Decatur	338	12	4,056	31,912	1.4	44,677	291	0.5	145	131	3.5	458	90	74	6,660	--------	--------
Delaware	1,482	12	17,784	40,234	1.3	52,304	5,880	1.1	6,468	35	3.0	105	723	70	50,610	12	120
Des Moines	574	20	11,480	23,064	1.3	29,983	141	1.2	169	300	2.9	870	552	91	50,232	--------	--------

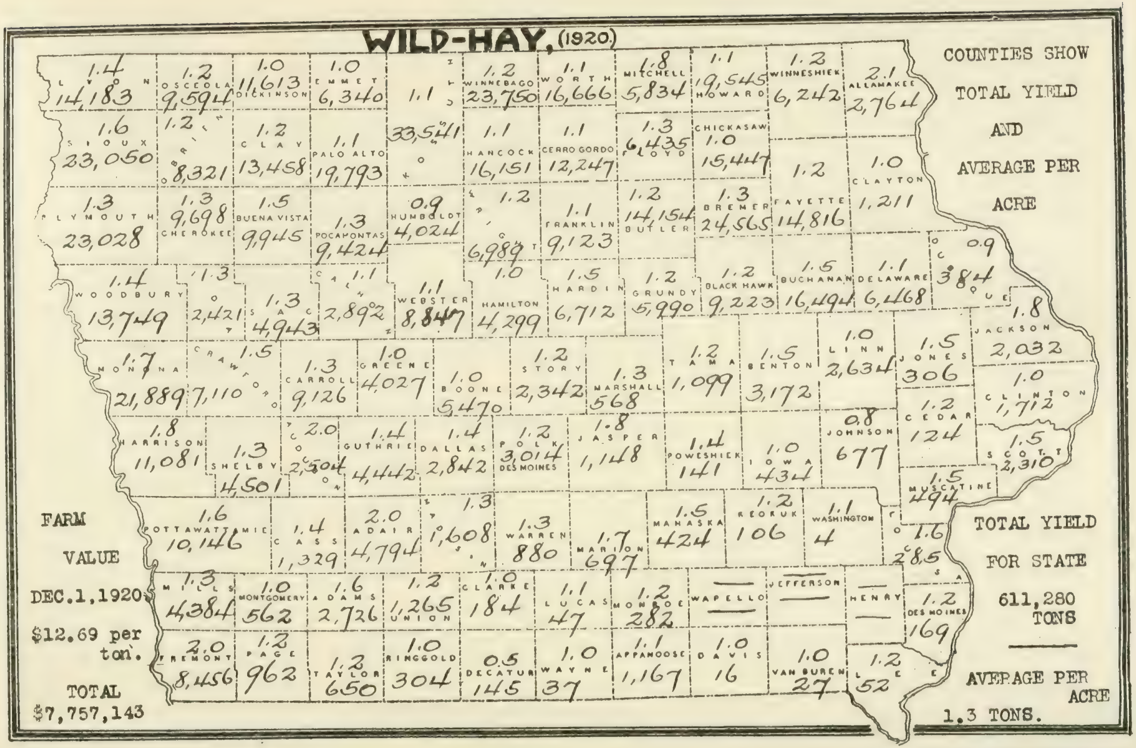
TABLE NO. 3—Continued.

Counties	Rye			Hay (tame)			Hay (wild)			Alfalfa			Potatoes			Flax Seed	
	Acres	Bushels per acre	Total bushels	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Bushels per acre	Total bushels	Acres	Total bushels
Dickinson	--------	------	--------	13,564	1.5	20,346	11,613	1.0	11,613	170	3.7	629	327	100	32,700	206	2,266
Dubuque	256	18	4,608	61,652	1.6	98,643	427	0.9	384	60	2.2	132	1,679	94	157,826	--------	--------
Emmet	123	11	1,353	16,852	1.6	26,963	6,340	1.0	6,340	126	3.5	441	235	112	26,320	194	1,746
Fayette	385	19	7,315	52,924	1.6	84,678	12,347	1.2	14,816	7	3.5	24	1,074	114	122,436	49	588
Floyd	483	17	8,211	31,058	1.3	40,375	4,950	1.3	6,435	54	2.0	108	1,062	115	122,130	115	1,380
Franklin	71	14	994	29,785	1.3	38,720	8,294	1.1	9,123	22	2.9	64	1,124	113	127,012	106	848
Fremont	319	18	5,742	11,191	1.6	17,906	4,228	2.0	8,456	9,627	3.0	28,881	346	69	23,874	--------	--------
Greene	10	22	220	20,485	1.4	28,679	4,027	1.0	4,027	263	3.0	789	219	142	31,098	1	10
Grundy	16	20	320	25,162	1.3	32,711	4,992	1.2	5,990	17	3.0	51	1,322	131	173,182	5	55
Guthrie	111	23	2,553	28,015	1.4	39,221	3,173	1.4	4,442	534	2.7	1,442	174	88	15,312	--------	--------
Hamilton	3	25	75	21,346	1.4	29,884	4,299	1.0	4,299	238	3.0	714	398	133	52,934	34	340
Hancock	70	18	1,260	24,873	1.3	32,335	14,683	1.1	16,151	78	3.5	273	745	173	128,885	307	3,377
Hardin	2	12	24	24,918	1.3	32,393	4,475	1.5	6,712	84	3.2	269	669	112	74,928	18	180
Harrison	276	16	4,416	7,269	2.0	14,538	6,156	1.8	11,081	21,017	3.1	65,153	635	106	67,310	10	10
Henry	575	14	8,050	27,860	1.3	36,218	--------	------	--------	106	3.1	329	300	60	18,000	--------	--------
Howard	143	15	2,145	30,851	1.3	40,106	17,768	1.1	19,545	12	3.4	41	719	116	83,404	700	5,600
Humboldt	48	19	912	16,950	1.3	22,035	4,471	0.9	4,024	260	2.5	650	204	112	22,848	47	470
Ida	7	15	105	23,613	1.7	40,142	1,862	1.3	2,421	2,900	3.2	9,280	649	127	82,423	--------	--------
Iowa	189	17	3,213	33,512	1.5	50,268	434	1.0	434	11	2.9	32	858	96	82,368	--------	--------
Jackson	630	19	11,970	61,084	1.3	79,409	1,129	1.8	2,032	96	2.7	259	944	115	108,560	--------	--------
Jasper	388	20	7,760	41,677	1.6	66,683	638	1.8	1,148	116	3.9	452	273	102	27,846	--------	--------
Jefferson	203	14	2,842	35,326	1.4	49,456	--------	------	--------	76	3.0	228	278	69	19,182	--------	--------
Johnson	751	18	13,518	43,239	1.7	73,506	846	0.8	677	168	2.6	437	695	90	62,550	--------	--------
Jones	636	20	12,720	49,264	1.6	78,822	204	1.5	306	43	4.0	172	1,092	126	137,592	--------	--------
Keokuk	377	15	5,655	35,810	1.4	50,134	88	1.2	106	63	3.0	189	489	102	49,878	--------	--------
Kossuth	144	16	2,304	35,799	1.3	46,539	30,492	1.1	33,541	250	2.5	625	1,152	125	144,000	1,420	15,620
Lee	4,434	16	70,944	30,253	1.4	42,354	43	1.2	52	434	2.9	1,259	892	86	76,712	--------	--------
Linn	1,020	14	14,280	51,527	1.4	72,138	2,634	1.0	2,634	65	2.7	176	1,067	103	109,901	35	280
Louisa	1,988	14	27,832	18,354	1.3	23,860	178	1.6	285	44	3.4	150	253	71	17,963	--------	--------
Lucas	153	15	2,295	25,120	1.3	32,656	43	1.1	47	164	3.0	492	36	106	3,816	--------	--------
Lyon	12	15	180	12,947	1.6	20,715	10,131	1.4	14,183	3,342	2.7	9,023	1,415	93	131,595	60	600
Madison	125	17	2,125	23,061	1.4	32,285	1,237	1.3	1,608	391	2.4	938	223	113	25,199	--------	--------
Mahaska	128	16	2,048	33,132	1.2	39,758	283	1.5	424	81	3.0	243	286	107	30,602	4	36

Marion	222	16	3,552	25,487	1.1	28,036	410	1.7	697	226	3.0	678	221	93	20,553	--------	--------
Marshall	119	20	2,380	35,214	1.3	45,778	437	1.3	568	86	3.0	258	442	121	53,482	--------	--------
Mills	203	16	3,248	10,513	1.6	16,821	3,372	1.3	4,384	11,303	3.2	36,170	396	137	54,252	--------	--------
Mitchell	146	17	2,482	30,551	1.5	45,826	3,241	1.8	5,834	4	3.0	12	4,016	146	586,336	747	8,964
Monona	59	18	1,062	8,384	2.0	16,768	12,876	1.7	21,889	16,249	3.1	50,372	593	136	80,648	--------	--------
Monroe	419	14	5,866	29,328	1.3	38,126	235	1.2	282	27	3.1	84	87	123	10,701	--------	--------
Montgomery	541	21	11,361	21,571	1.5	32,356	562	1.0	562	5,262	3.3	17,365	309	98	30,282	--------	--------
Muscatine	2,984	14	41,776	22,934	1.4	32,108	329	1.5	494	393	3.5	1,376	1,180	91	107,380	--------	--------
O'Brien	4	20	80	22,599	1.7	38,418	6,934	1.2	8,321	1,276	4.4	5,614	864	116	100,224	50	500
Osceola	30	20	600	14,582	1.5	21,873	7,995	1.2	9,594	182	2.2	400	609	125	76,125	254	3,048
Page	500	19	9,500	26,788	1.6	42,861	802	1.2	962	5,298	3.0	15,894	387	65	25,155	--------	--------
Palo Alto	463	19	8,797	16,846	1.2	20,215	17,994	1.1	19,793	217	3.5	760	438	119	52,122	770	7,700
Plymouth	178	17	3,026	21,704	1.5	32,556	17,714	1.3	23,028	14,322	3.2	45,830	1,321	103	136,063	30	300
Pocahontas	480	18	8,640	18,671	1.6	29,874	7,249	1.3	9,424	269	3.2	861	537	130	69,810	50	500
Polk	359	15	5,385	21,606	1.3	28,088	2,512	1.2	3,014	653	2.3	1,502	457	89	40,673	--------	--------
Pottawattamie	556	20	11,120	25,758	1.8	46,364	6,341	1.6	10,146	21,806	3.1	67,599	1,359	117	159,003	--------	--------
Poweshiek	11	16	176	35,548	1.4	49,767	101	1.4	141	116	2.5	290	378	92	34,776	--------	--------
Ringgold	272	16	4,352	29,778	1.3	38,711	304	1.0	304	51	2.0	102	102	94	9,588	--------	--------
Sac	18	16	288	27,194	1.5	40,791	3,802	1.3	4,943	782	2.8	2,190	745	76	56,620	--------	--------
Scott	1,590	15	23,850	27,332	1.4	38,265	1,540	1.5	2,310	1,090	3.1	3,379	2,034	85	172,890	5	50
Shelby	178	19	3,382	29,947	1.3	38,931	3,462	1.3	4,501	5,120	2.7	13,824	754	95	71,630	--------	--------
Sioux	39	14	546	18,797	1.9	35,714	14,406	1.6	23,050	7,488	3.2	23,962	1,273	156	198,588	37	370
Story	153	20	3,060	25,338	1.3	32,939	1,952	1.2	2,342	270	2.3	621	19	106	2,014	--------	--------
Tama	160	20	3,200	46,315	1.5	69,472	916	1.2	1,099	61	2.0	122	1,069	91	97,279	--------	--------
Taylor	345	15	5,175	27,549	1.4	38,569	542	1.2	650	881	2.2	1,938	355	54	19,170	--------	--------
Union	206	12	2,472	22,473	1.4	31,462	1,054	1.2	1,265	60	2.2	132	302	76	22,952	5	50
Van Buren	516	16	8,256	35,087	1.3	45,613	27	1.0	27	387	2.9	1,122	99	88	8,712	1	10
Wapello	309	15	4,635	30,318	1.4	42,445	--------	--------	--------	114	3.0	342	257	119	30,583	--------	--------
Warren	206	17	3,502	29,773	1.2	35,728	677	1.3	880	364	2.3	837	188	96	18,048	--------	--------
Washington	152	17	2,584	33,123	1.5	49,684	4	1.1	4	61	3.0	183	418	68	28,424	--------	--------
Wayne	218	16	3,488	35,557	1.3	46,224	37	1.0	37	57	3.5	200	33	86	2,838	--------	--------
Webster	3	21	63	23,326	1.4	32,657	8,043	1.1	8,847	725	3.2	2,320	424	112	47,488	65	715
Winnebago	37	17	629	18,278	1.5	27,417	19,792	1.2	23,750	34	4.0	136	585	149	87,165	922	9,220
Winneshiek	338	19	6,422	52,442	1.6	83,907	5,202	1.2	6,242	13	3.8	49	1,067	74	78,958	686	6,860
Woodbury	69	20	1,380	17,278	1.9	32,838	9,821	1.4	13,749	24,597	2.6	63,952	1,019	116	118,204	5	55
Worth	202	16	3,232	21,052	1.6	33,683	15,151	1.1	16,666	21	3.3	69	797	103	82,091	2,866	31,526
Wright	47	16	752	26,454	1.5	39,681	5,824	1.2	6,989	71	2.5	178	576	133	76,608	84	840
Grand total	39,268	16.1	631,370	2,868,667	1.4	4,138,001	487,625	1.3	611,280	180,381	3.1	543,827	65,560	111.9	7,333,437	10,951	114,844


RYE, (1920)
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
LYON 15 180
OSCEOLA 20 600
DICKINSON —
EMMET 11 1,353
KOSSUTH 16 2,304
WINNEBAGO 17 629
WORTH 16 3,232
MITCHELL 17 2,482
HOWARD 15 2,145
WINNESHIEK 19 6,422
ALLAMAKEE 16 7,024
SIOUX 14 546
O'BRIEN 20 80
CLAY 15 375
PALO ALTO 19 8,797
HANCOCK 18 1,260
CERRO GORDO 15 1,065
FLOYD 17 8,211
CHICKASAW 15 2,460
CLAYTON 17 5,304
PLYMOUTH 17 3,026
CHEROKEE 18 108
BUENA VISTA 25 1,875
POCAHONTAS 18 8,640
HUMBOLDT 19 912
WRIGHT 16 752
FRANKLIN 14 994
BUTLER 17 12,920
BREMER 12 5,616
FAYETTE 19 7,315
WOODBURY 20 1,380
IDA 15 105
SAC 16 288
CALHOUN 17 731
WEBSTER 21 63
HAMILTON 25 75
HARDIN 12 24
GRUNDY 20 320
BLACK HAWK 15 32,280
BUCHANAN 16 11,088
DELAWARE 12 17,784
DUBUQUE 18 2,608
MONONA 18 1,062
CRAWFORD 20 2000
CARROLL 19 1596
GREENE 22 220
BOONE 22 1,012
STORY 20 3,060
MARSHALL 20 2,380
TAMA 20 3,200
BENTON 18 16,740
LINN 14 14,280
JONES 20 12,720
JACKSON 19 11,970
HARRISON 16 4,416
SHELBY 19 3382
AUDUBON 18 594
GUTHRIE 23 2,553
DALLAS 21 3,486
POLK 15 5,385
DES MOINES
JASPER 20 7,760
POWESHIEK 16 176
IOWA 17 3,213
JOHNSON 18 13,518
CEDAR 18 7,650
CLINTON 16 28,128
SCOTT 15 23,859
MUSCATINE 14 41,776
POTTAWATTAMIE 20 11,120
CASS 16 6,048
ADAIR 12 1,932
MADISON 17 2,125
WARREN 17 3,502
MARION 16 3,552
MAHASKA 16 2,048
KEOKUK 15 5,655
WASHINGTON 17 2,584
LOUISA 14 27,832
MILLS 16 3,248
MONTGOMERY 21 11,361
ADAMS 16 1,744
UNION 12 2,472
CLARKE 15 1,590
LUCAS 15 2,295
MONROE 14 5,866
WAPELLO 15 4,635
JEFFERSON 14 2,842
HENRY 14 8,050
DES MOINES 20 11,480
FREMONT 18 5,742
PAGE 19 9,500
TAYLOR 15 5,175
RINGGOLD 16 4352
DECATUR 12 4,056
WAYNE 16 3488
APPANOOSE 15 9240
DAVIS 16 7,136
VAN BUREN 16 8,256
LEE 16 70,944
FARM VALUE DEC. 1, 1920 $1.17 per bu. TOTAL $738,703
TOTAL YIELD FOR STATE 631,370 BUSHELS
AVERAGE PER ACRE 16.1 BUSHELS


TAME-HAY (1920)
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
TOTAL YIELD FOR STATE 4,138,001 TONS
AVERAGE PER ACRE 1.4 TONS.
FARM VALUE DEC.1,1920. $16.24 per ton
TOTAL $67,201,136
LYON 1.6 20,715
OSCEOLA 1.5 21,873
DICKINSON 1.5 20,346
EMMET 1.6 26,962
KOSSUTH 1.3 46,539
WINNEBAGO 1.5 27,417
WORTH 1.6 33,683
MITCHELL 1.5 45,826
HOWARD 1.3 40,106
WINNESHIEK 1.6 83,907
ALLAMAKEE 1.7 86,494
SIOUX 1.9 35,714
O'BRIEN 1.7 38,418
CLAY 1.7 34,904
PALO ALTO 1.2 20,215
HANCOCK 1.3 32,335
CERRO GORDO 1.6 42,995
FLOYD 1.3 40,375
CHICKASAW 1.6 38,676
FAYETTE 1.6 84,678
CLAYTON 1.4 90,531
PLYMOUTH 1.5 32,556
CHEROKEE 1.4 31,409
BUENA VISTA 1.5 31,542
POCAHONTAS 1.6 29,874
HUMBOLDT 1.3 22,035
WRIGHT 1.5 39,681
FRANKLIN 1.3 38,720
BUTLER 1.4 35,196
BREMER 1.5 27,456
BUCHANAN 1.5 48,291
DELAWARE 1.3 52,304
DUBUQUE 1.6 98,643
WOODBURY 1.9 32,838
IDA 1.7 40,142
SAC 1.5 40,791
CALHOUN 1.6 27,590
WEBSTER 1.4 32,657
HAMILTON 1.4 29,884
HARDIN 1.3 32,393
GRUNDY 1.3 32,711
BLACK HAWK 1.4 39,102
BENTON 1.5 65,204
LINN 1.4 72,138
JONES 1.6 78,822
JACKSON 1.3 79,409
MONONA 2.0 16,768
CRAWFORD 1.4 60,789
CARROLL 1.4 39,316
GREENE 1.4 28,679
BOONE 1.6 30,496
STORY 1.3 32,939
MARSHALL 1.3 45,778
TAMA 1.5 59,472
IOWA 1.5 50,268
JOHNSON 1.7 73,506
CEDAR 1.4 65,020
CLINTON 1.5 82,218
HARRISON 2.0 14,538
SHELBY 1.3 38,931
AUDUBON 1.7 44,052
GUTHRIE 1.4 39,221
DALLAS 1.3 25,401
POLK 1.3 28,088
DES MOINES
JASPER 1.3 79,409
POWESHIEK 1.4 49,769
SCOTT 1.4 38,265
MUSCATINE 1.4 32,108
POTTAWATTAMIE 1.8 46,364
CASS 1.4 39,505
ADAIR 1.4 44,216
MADISON 1.4 32,285
WARREN 1.2 35,728
MARION 1.1 28,036
MAHASKA 1.2 39,758
KEOKUK 1.4 50,134
WASHINGTON 1.5 49,684
LOUISA 1.3 23,860
MILLS 1.6 16,821
MONTGOMERY 1.5 32,356
ADAMS 1.5 32,946
UNION 1.4 31,462
CLARKE 1.3 33,882
LUCAS 1.3 32,656
MONROE 1.3 38,126
WAPELLO 1.4 42,445
JEFFERSON 1.4 49,456
HENRY 1.3 36,218
DES MOINES 1.3 29,983
FREMONT 1.6 17,906
PAGE 1.6 42,861
TAYLOR 1.4 38,569
RINGGOLD 1.3 38,711
DECATUR 1.4 44,677
WAYNE 1.3 46,224
APPANOOSE 1.0 31,746
DAVIS 1.3 47,018
VAN BUREN 1.3 45,613
LEE 1.4 42,354


LYON 1.4 14,183
OSCEOLA 1.2 9,594
DICKINSON 1.0 11,613
EMMET 1.0 6,340
1.1 33,541
WINNEBAGO 1.2 23,750
WORTH 1.1 16,666
MITCHELL 1.8 5,834
HOWARD 1.1 9,545
WINNESHIEK 1.2 6,242
ALLAMAKEE 2.1 2,764
SIOUX 1.6 23,050
1.2 8,321
CLAY 1.2 13,458
PALO ALTO 1.1 19,793
HANCOCK 1.1 16,151
CERRO GORDO 1.1 12,247
FLOYD 1.3 6,435
CHICKASAW 1.0 15,447
1.2
FAYETTE 14,816
CLAYTON 1.0 1,211
PLYMOUTH 1.3 23,028
CHEROKEE 1.3 9,698
BUENA VISTA 1.5 9,945
POCAHONTAS 1.3 9,424
HUMBOLDT 0.9 4,024
1.2 6,989
FRANKLIN 1.1 9,123
BUTLER 1.2 14,154
BREMER 1.3 24,565
0.9 384
WOODBURY 1.4 13,749
1.3 2,421
1.3 4,943
1.1 2,892
WEBSTER 1.1 8,847
HAMILTON 1.0 4,299
HARDIN 1.5 6,712
GRUNDY 1.2 5,990
BLACK HAWK 1.2 9,223
BUCHANAN 1.5 16,494
DELAWARE 1.1 6,468
JACKSON 1.8 2,032
MONONA 1.7 21,889
1.5 7,110
CARROLL 1.3 9,126
GREENE 1.0 4,027
BOONE 1.0 5,470
STORY 1.2 2,342
MARSHALL 1.3 568
TAMA 1.2 1,099
BENTON 1.5 3,172
LINN 1.0 2,634
JONES 1.5 306
CLINTON 1.0 1,712
HARRISON 1.8 11,081
SHELBY 1.3 4,501
2.0 2,504
GUTHRIE 1.4 4,442
DALLAS 1.4 2,842
POLK 1.2 3,014
DES MOINES
JASPER 1.8 1,148
POWESHIEK 1.4 141
IOWA 1.0 434
JOHNSON 0.8 677
CEDAR 1.2 124
SCOTT 1.5 2,310
MUSCATINE 1.5 494
POTTAWATTAMIE 1.6 10,146
CASS 1.4 1,329
ADAIR 2.0 4,794
1.3 1,608
WARREN 1.3 880
MARION 1.7 697
MAHASKA 1.5 424
KEOKUK 1.2 106
WASHINGTON 1.1 4
1.6 285
1.3 4,384
MONTGOMERY 1.0 562
ADAMS 1.6 2,726
UNION 1.2 1,265
CLARKE 1.0 184
LUCAS 1.1 47
MONROE 1.2 282
WAPELLO — —
JEFFERSON —
HENRY —
DES MOINES 1.2 169
FREMONT 2.0 8,456
PAGE 1.2 962
TAYLOR 1.2 650
RINGGOLD 1.0 304
DECATUR 0.5 145
WAYNE 1.0 37
APPANOOSE 1.1 1,167
DAVIS 1.0 16
VAN BUREN 1.0 27
LEE 1.2 52

WILD-HAY, (1920)

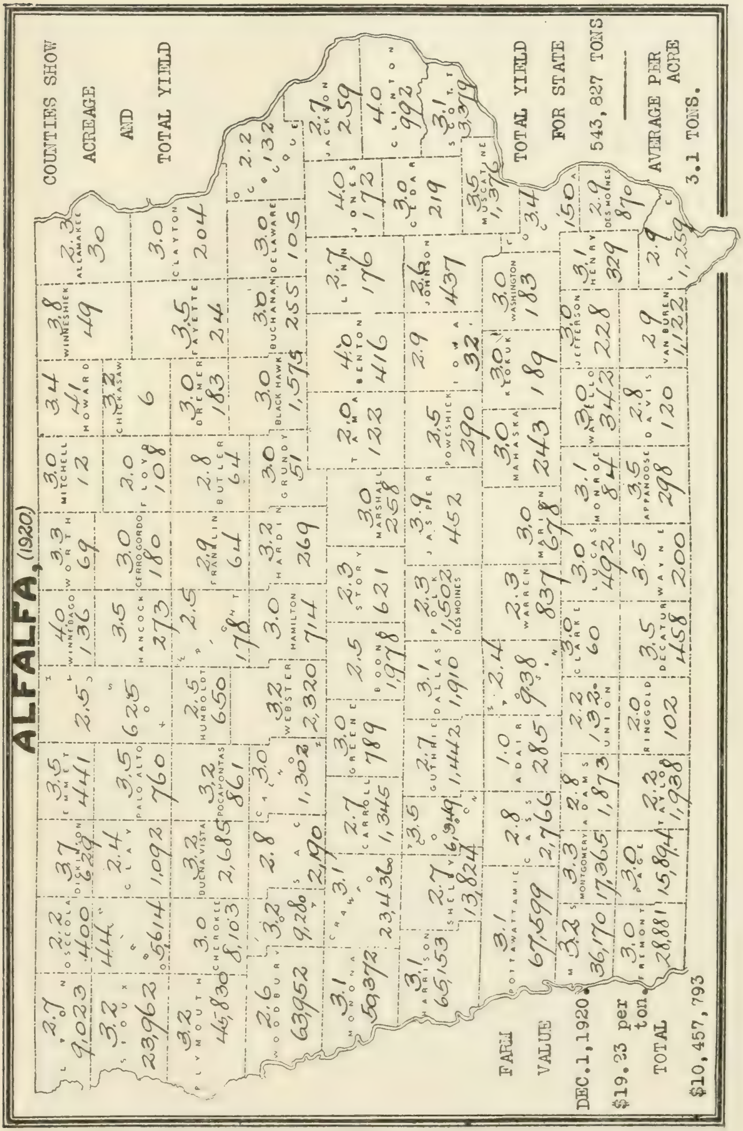
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE

TOTAL YIELD FOR STATE 611,280 TONS

AVERAGE PER ACRE 1.3 TONS.

FARM VALUE DEC.1,1920: $12.69 per ton.

TOTAL $7,757,143


LYON 2.7 9,023
OSCEOLA 2.2 400
DICKINSON 3.7 629
EMMET 3.5 441
KOSSUTH 2.5 625
WINNEBAGO 4.0 136
WORTH 3.3 69
MITCHELL 3.0 12
HOWARD 3.4 41
WINNESHIEK 3.8 49
ALLAMAKEE 2.3 30
SIOUX 3.2 23,962
O'BRIEN 4.4 5,614
CLAY 2.4 1,092
PALO ALTO 3.5 760
HANCOCK 3.5 273
CERRO GORDO 3.0 180
FLOYD 2.0 108
CHICKASAW 3.2 6
FAYETTE 3.5 24
CLAYTON 3.0 204
PLYMOUTH 3.2 45,830
CHEROKEE 3.0 8,103
BUENA VISTA 3.2 2,685
POCAHONTAS 3.2 861
HUMBOLDT 2.5 650
WRIGHT 2.5 178
FRANKLIN 2.9 64
BUTLER 2.8 64
BREMER 3.0 183
BLACK HAWK 3.0 1,575
BUCHANAN 3.0 255
DELAWARE 3.0 105
DUBUQUE 2.2 132
WOODBURY 2.6 63952
IDA 3.2 9,286
SAC 2.8 2,190
CALHOUN 3.0 1,302
WEBSTER 3.2 2,320
HAMILTON 3.0 714
HARDIN 3.2 269
GRUNDY 3.0 51
JACKSON 2.7 259
CLINTON 4.0 992
MONONA 3.1 50372
CRAWFORD 3.1 23436
CARROLL 2.7 1,345
GREENE 3.0 789
BOONE 2.5 1,978
STORY 2.3 621
MARSHALL 3.0 258
TAMA 2.0 122
BENTON 4.0 416
LINN 2.7 176
JONES 4.0 172
CEDAR 3.0 219
SCOTT 3.1 3,319
HARRISON 3.1 65,153
SHELBY 2.7 13,824
AUDUBON 3.5 6,949
GUTHRIE 2.7 1,442
DALLAS 3.1 1,910
POLK DES MOINES 2.3 1,502
JASPER 3.9 452
POWESHIEK 3.5 290
IOWA 2.9 32
JOHNSON 2.6 437
MUSCATINE 3.5 1,376
POTTAWATTAMIE 3.1 67,599
CASS 2.8 2,766
ADAIR 1.0 285
MADISON 2.4 938
WARREN 2.3 837
MARION 3.0 678
MAHASKA 3.0 243
KEOKUK 3.0 189
WASHINGTON 3.0 183
LOUISA 3.4 150
MILLS 3.2 36,170
MONTGOMERY 3.3 17,365
ADAMS 2.8 1,873
UNION 2.2 132
CLARKE 3.0 60
LUCAS 3.0 492
MONROE 3.1 84
WAPELLO 3.0 342
JEFFERSON 3.0 228
HENRY 3.1 329
DES MOINES 2.9 870
FREMONT 3.0 28,881
PAGE 3.0 15,894
TAYLOR 2.2 1,938
RINGGOLD 2.0 102
DECATUR 3.5 458
WAYNE 3.5 200
APPANOOSE 3.5 298
DAVIS 2.8 120
VAN BUREN 2.9 1,122
LEE 2.9 1,259

ALFALFA, (1920)

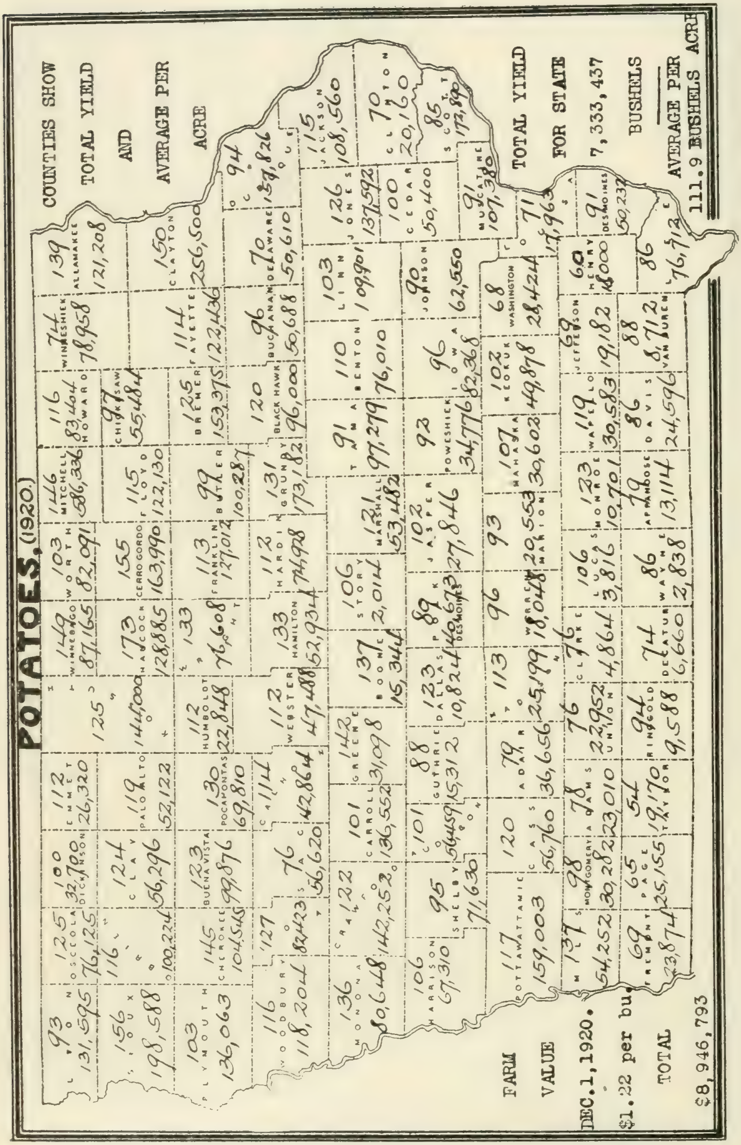
COUNTIES SHOW ACREAGE AND TOTAL YIELD

TOTAL YIELD FOR STATE 543,827 TONS

AVERAGE PER ACRE 3.1 TONS.

FARM VALUE DEC. 1, 1920. $19.23 per ton.

TOTAL $10,457,793


POTATOES. (1920.)
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
TOTAL YIELD FOR STATE 7,333,437 BUSHELS
AVERAGE PER ACRE 111.9 BUSHELS
FARM VALUE DEC.1,1920. $1.22 per bu. TOTAL $8,946,793
LYON 93 131,595
OSCEOLA 125 76,125
DICKINSON 100 32,700
EMMET 112 26,320
KOSSUTH 125 144,000
WINNEBAGO 149 87,165
WORTH 103 82,091
MITCHELL 146 86,336
HOWARD 116 83,464
WINNESHIEK 74 78,958
ALLAMAKEE 139 121,208
SIOUX 156 198,588
O'BRIEN 116 100,224
CLAY 124 56,296
PALO ALTO 119 52,122
HANCOCK 173 128,885
CERRO GORDO 155 163,990
FLOYD 115 122,130
CHICKASAW 97 55,484
FAYETTE 114 122,436
CLAYTON 150 256,500
PLYMOUTH 103 136,063
CHEROKEE 145 104,545
BUENA VISTA 123 99,876
POCAHONTAS 130 69,810
HUMBOLDT 112 22,848
WRIGHT 133 76,608
FRANKLIN 113 127,012
BUTLER 99 100,287
BREMER 125 153,375
BUCHANAN 96 50,688
DELAWARE 70 50,610
DUBUQUE 94 137,826
WOODBURY 116 118,204
IDA 127 82,423
SAC 76 56,620
CALHOUN 114 42,864
WEBSTER 112 47,488
HAMILTON 133 52,934
HARDIN 112 74,928
GRUNDY 131 173,182
BLACK HAWK 120 96,000
BENTON 110 76,010
LINN 103 109,901
JONES 126 137,592
JACKSON 115 108,560
MONONA 136 80,648
CRAWFORD 122 142,252
CARROLL 101 136,552
GREENE 142 31,098
BOONE 137 15,344
STORY 106 2,014
MARSHALL 121 53,482
TAMA 91 97,279
CEDAR 100 50,400
CLINTON 70 20,160
HARRISON 106 67,310
SHELBY 95 71,630
AUDUBON 101 56,459
GUTHRIE 88 15,312
DALLAS 123 10,824
POLK 89 40,673
DES MOINES
JASPER 102 27,846
POWESHIEK 93 34,776
IOWA 96 82,368
JOHNSON 90 62,550
SCOTT 85 173,890
MUSCATINE 91 107,380
POTTAWATTAMIE 117 159,003
CASS 120 56,760
ADAIR 79 36,656
MADISON 113 25,199
WARREN 96 18,048
MARION 93 20,553
MAHASKA 107 30,603
KEOKUK 102 49,878
WASHINGTON 68 28,424
LOUISA 71 17,963
MILLS 137 54,252
MONTGOMERY 98 30,282
ADAMS 78 23,010
UNION 76 22,952
CLARKE 76 4,864
LUCAS 106 3,816
MONROE 123 10,701
WAPELLO 119 30,583
JEFFERSON 69 19,182
HENRY 60 18,000
DES MOINES 91 50,232
FREMONT 69 23,874
PAGE 65 25,155
TAYLOR 51 19,170
RINGGOLD 94 9,588
DECATUR 74 6,660
WAYNE 86 2,838
APPANOOSE 79 13,114
DAVIS 86 24,596
VAN BUREN 88 8,712
LEE 86 76,712

Number of the various classes
July 1, 1920; number of swi
number of pounds of wool

21; also number of swine on farms
shipped in for feeding during 1920;
in 1920; all by counties.

Counties	Horses (all ages) total number Jan. 1, 1921	Sheep (All ages) on farms Jan. 1, 1921	Sheep Shipped in for feeding during 1920	Sheep Total pounds wool clipped during 1920	Poultry Total number all varieties on farms Jan. 1, 1921	Poultry No. dozen eggs received during 1920 (estimated)
Adair	13,864	16,084	2,906	110,054	274,914	1,054,297
Adams	9,778	17,191	3,814	126,686	211,537	904,025
Allamakee	9,328	7,122	507	47,560	223,348	892,102
Appanoose	9,178	24,699	212	144,416	216,867	837,138
Audubon	11,374	4,175	9,039	9,811	226,548	878,685
Benton	16,545	8,150	1,662	42,794	297,573	974,095
Black Hawk	12,622	3,664	571	20,948	268,963	1,096,834
Boone	13,015	4,187	3,264	14,648	313,116	1,113,762
Bremer	9,782	2,006	28	12,261	278,880	968,128
Buchanan	11,716	6,006	428	40,320	276,720	1,131,971
Buena Vista	13,676	1,832	3,960	13,545	230,402	818,039
Butler	13,836	5,008	56	30,786	288,469	1,035,978
Calhoun	13,941	2,374	1,205	10,005	255,064	836,701
Carroll	12,838	4,168	3,887	23,797	298,207	974,590
Cass	13,396	18,151	5,865	99,868	250,716	949,529
Cedar	13,761	14,474	7,444	61,616	285,346	1,014,624
Cerro Gordo	12,215	3,636	433	23,170	230,156	735,107
Cherokee	12,839	2,128	1,838	9,152	198,199	666,187
Chickasaw	11,338	3,416	624	22,490	234,489	937,955
Clarke	7,651	8,629	144	60,831	169,773	690,869
Clay	12,230	3,521	3,360	17,450	204,092	671,568
Clayton	15,143	6,180	491	50,444	389,011	1,476,154
Clinton	15,367	5,388	2,973	28,652	312,987	1,087,621
Crawford	15,702	3,825	1,924	12,601	295,346	1,100,292
Dallas	13,140	7,305	7,592	41,953	295,739	1,145,581
Davis	8,871	63,576	647	446,107	312,521	1,048,163
Decatur	9,622	12,958	1,215	74,538	240,428	987,442
Delaware	12,524	4,994	911	36,662	304,889	1,098,135

ERRATA

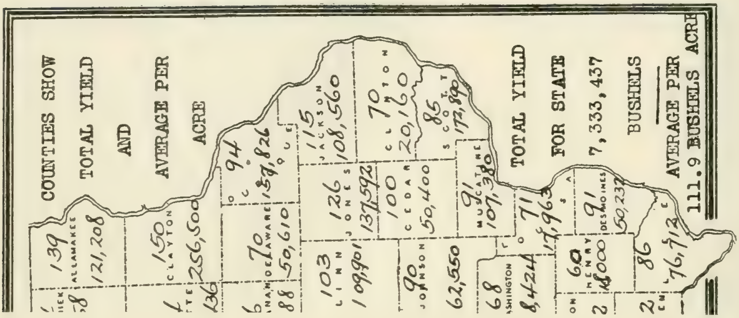
Page 711 Alfalfa Chart, upper right hand corner, should read "Counties Show *Average* and Total Yield."

		Should be
Page 713	Boone County, Cows and Heifers kept for milk	10,501
Page 713	Cerro Gordo County, Cows and Heifers kept for milk	14,477
Page 714	Franklin County, Sheep shipped in for feeding	16,130

Page 714 Make column heading Swine Jan. 1, 1921, read July 1, 1920, and column heading July 1, 1920, read Jan. 1, 1921.

		Acres	*Yield Bu.*
Page 717	Webster County, Clover Seed should be	375	279

Page 732 Total Value All Hay, Year 1914, should be $48,730,122


COUNTIES SHOW
TOTAL YIELD
AND
AVERAGE PER
ACRE
TOTAL YIELD
FOR STATE
7,333,437
BUSHELS
AVERAGE PER
111.9 BUSHELS ACRE
ALLAMAKEE 139 121,208
CLAYTON 150 256,500
DUBUQUE 94 137,826
DELAWARE 70 50,610
JACKSON 115 108,560
JONES 126 137,592
LINN 103 109,901
CLINTON 70 20,160
CEDAR 100 50,400
SCOTT 85 172,890
JOHNSON 90 62,550
MUSCATINE 91 107,380
WASHINGTON 68 8,424
LOUISA 71 17,963
HENRY 60 18,000
DES MOINES 91 50,232
LEE 86 76,712

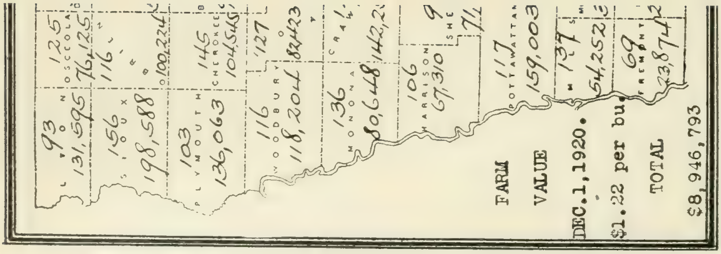

FARM
VALUE
DEC.1,1920.
$1.22 per bu.
TOTAL
$8,946,793
LYON 93 131,595
OSCEOLA 125 76,125
SIOUX 156 198,588
O'BRIEN 116 100,224
PLYMOUTH 103 136,063
CHEROKEE 145 104,545
WOODBURY 116 118,204
IDA 127 82,423
MONONA 136 80,648
CRAWFORD 142,2
HARRISON 106 67,310
SHELBY 9
POTTAWATTAMIE 117 159,003
CASS 71
MILLS 137 54,252
FREMONT 69 23,874

TABLE NO. 4.

Number of the various classes of live stock and poultry on farms January 1, 1921; also number of swine on farms July 1, 1920; number of swine lost from cholera during 1920; number of sheep shipped in for feeding during 1920; number of pounds of wool clipped, 1920; and number of dozen eggs produced in 1920; all by counties.

Counties	Horses (all ages) total number Jan. 1, 1921	Mules (all ages) total number Jan. 1, 1921	Swine			Cattle			Sheep			Poultry	
			Total number on farms July 1, 1920	Total number lost by cholera, 1920	Total number on farms Jan. 1, 1921	Cows and heifers kept for milk Jan. 1, 1921	Other cattle not kept for milk Jan. 1, 1921	Total cattle (all ages) Jan. 1, 1921	(All ages) on farms Jan. 1, 1921	Shipped in for feeding during 1920	Total pounds wool clipped during 1920	Total number all varieties on farms Jan. 1, 1921	No. dozen eggs received during 1920 (estimated)
Adair	13,864	1,279	99,796	2,653	80,816	8,597	35,832	44,429	16,084	2,906	110,054	274,914	1,054,297
Adams	9,778	1,135	66,227	2,502	51,031	6,595	24,930	31,525	17,191	3,814	126,686	211,537	904,025
Allamakee	9,328	86	70,727	58	42,185	19,783	39,155	58,938	7,122	507	47,560	223,348	892,102
Appanoose	9,178	1,121	36,830	898	23,472	8,756	18,220	26,976	24,699	212	144,416	216,867	837,138
Audubon	11,374	529	80,383	617	65,224	8,461	32,912	41,373	4,175	9,039	9,811	226,548	878,685
Benton	16,545	648	115,993	1,712	91,435	12,198	44,018	56,216	8,150	1,662	42,794	297,573	974,095
Black Hawk	12,622	279	90,755	3,290	68,282	15,541	33,065	48,606	3,664	571	20,948	268,963	1,096,834
Boone	13,015	845	70,477	3,247	54,646	20,501	21,749	32,250	4,187	3,264	14,648	313,116	1,113,762
Bremer	9,782	101	65,208	565	51,476	20,804	17,572	38,376	2,006	28	12,261	278,880	968,128
Buchanan	11,716	433	85,249	2,028	65,755	14,688	31,657	46,345	6,006	428	40,320	276,720	1,131,971
Buena Vista	13,676	572	105,271	4,557	83,512	9,207	31,541	40,748	1,832	3,960	13,545	230,402	818,039
Butler	13,836	124	78,088	1,472	57,222	15,706	36,509	52,215	5,008	56	30,786	288,469	1,035,978
Calhoun	13,941	797	63,165	1,829	46,601	7,718	18,097	25,815	2,374	1,205	10,005	255,064	836,701
Carroll	12,838	763	102,687	5,883	71,410	10,811	33,167	43,978	4,168	3,887	23,797	298,207	974,590
Cass	13,396	1,450	99,771	3,817	81,861	7,962	33,497	41,459	18,151	5,865	99,868	250,716	949,529
Cedar	13,761	925	162,817	5,929	114,850	10,652	43,103	53,755	14,474	7,444	61,616	285,346	1,014,624
Cerro Gordo	12,215	232	72,358	1,840	53,401	14,447	31,532	46,009	3,636	433	23,170	230,156	735,107
Cherokee	12,839	426	118,028	4,893	90,100	6,864	40,769	47,633	2,128	1,838	9,152	198,199	666,187
Chickasaw	11,338	42	60,027	191	44,453	16,689	29,451	46,140	3,416	624	22,490	234,489	937,955
Clarke	7,651	835	43,200	1,195	33,263	4,871	18,760	23,631	8,629	144	60,831	169,773	690,869
Clay	12,230	349	87,316	1,705	66,373	9,950	31,509	41,459	3,521	3,360	17,450	204,092	671,568
Clayton	15,143	201	141,568	546	73,061	27,913	38,195	66,108	6,180	491	50,444	389,011	1,476,154
Clinton	15,367	332	146,127	2,940	86,996	15,742	44,922	60,664	5,388	2,973	28,652	312,987	1,087,621
Crawford	15,702	1,102	163,886	5,414	116,468	12,019	51,315	63,334	3,825	1,924	12,601	295,346	1,100,292
Dallas	13,140	1,277	89,314	922	71,173	9,871	21,976	31,847	7,305	7,592	41,953	295,739	1,145,581
Davis	8,871	941	38,942	170	28,160	8,253	19,295	27,548	63,576	647	446,107	312,521	1,048,163
Decatur	9,622	1,166	45,717	579	34,270	7,681	18,240	25,921	12,958	1,215	74,538	240,428	987,442
Delaware	12,524	329	108,738	2,390	70,999	21,687	26,783	48,470	4,994	911	36,662	304,889	1,098,135

TABLE NO. 4—Continued.

Counties	Horses (all ages) total number Jan. 1, 1921	Mules (all ages) total number Jan. 1, 1921	Swine			Cattle			Sheep			Poultry	
			Total number on farms Jan. 1, 1921	Total number lost by cholera, 1920	Total number on farms July 1, 1920	Cows and heifers kept for milk Jan. 1, 1921	Other cattle not kept for milk Jan. 1, 1921	Total cattle (all ages) Jan. 1, 1921	(All ages) on farms Jan. 1, 1921	Shipped in for feeding during 1920	Total pounds wool clipped during 1920	Total number all varieties on farms Jan. 1, 1921	No. dozen eggs received during 1920 (estimated)
Des Moines	9,690	441	66,174	1,266	56,892	7,549	15,497	23,046	5,119	1,752	29,132	207,681	821,326
Dickinson	7,432	322	43,697	480	33,647	6,542	19,472	26,014	2,604	1,313	15,825	109,597	403,095
Dubuque	10,744	185	101,939	566	52,016	20,530	27,603	48,133	4,663	441	39,032	257,716	853,408
Emmet	8,041	303	43,633	908	33,571	7,274	16,868	24,142	1,183	--------	6,439	122,414	384,381
Fayette	15,642	329	101,630	202	73,225	26,401	42,475	68,876	6,961	992	43,738	424,140	1,851,153
Floyd	11,688	124	67,463	1,771	49,926	11,459	31,473	42,932	6,598	1,280	42,289	262,431	1,012,406
Franklin	13,853	280	96,562	2,174	73,799	12,898	37,317	50,215	13,728	16,139	25,336	303,082	996,446
Fremont	8,764	2,388	63,653	2,153	53,782	5,234	21,121	26,355	2,737	1,339	10,474	166,998	625,160
Greene	14,513	904	70,874	1,263	52,105	7,774	24,762	32,536	6,230	3,035	29,739	262,163	876,479
Grundy	11,841	322	81,537	2,506	55,926	11,805	33,485	45,290	4,592	6,362	17,222	281,035	1,108,224
Guthrie	13,026	1,057	87,257	2,871	70,395	8,684	28,498	37,182	9,078	4,104	48,698	256,797	944,671
Hamilton	14,395	550	93,833	3,315	71,901	10,270	26,654	36,924	5,948	3,366	13,521	304,872	1,087,750
Hancock	11,579	276	60,311	3,332	43,593	11,884	22,886	34,770	3,227	942	14,759	241,275	896,399
Hardin	13,023	572	91,170	5,695	64,253	10,596	31,279	41,875	6,910	6,530	28,819	294,001	947,318
Harrison	13,740	2,105	93,803	2,099	76,589	10,255	24,136	34,391	5,202	3,965	12,636	271,298	1,069,990
Henry	10,014	774	71,950	1,239	53,638	6,881	20,975	27,856	18,022	3,241	109,547	236,092	1,063,822
Howard	9,634	89	53,082	625	36,898	16,229	29,591	45,820	4,418	10	26,743	198,147	870,347
Humboldt	9,788	256	70,604	1,868	56,993	7,471	26,714	34,185	3,074	1,907	15,145	172,095	550,696
Ida	10,797	791	112,446	5,588	86,158	5,185	32,788	37,973	2,811	6,418	5,886	184,637	743,813
Iowa	13,404	1,278	125,606	4,119	93,181	9,351	39,593	48,944	6,827	158	47,672	296,144	1,010,594
Jackson	9,738	299	91,986	--------	46,627	17,310	35,012	52,322	4,807	3,562	27,764	239,507	830,736
Jasper	16,475	1,287	136,641	7,874	102,460	11,370	41,097	52,467	12,910	7,783	63,675	392,104	1,623,298
Jefferson	9,285	586	61,083	857	47,904	6,673	18,085	24,758	14,543	1,905	85,583	228,258	1,115,528
Johnson	13,798	1,223	142,721	4,811	101,132	9,488	37,327	46,815	8,940	824	64,131	339,076	1,189,926
Jones	10,979	395	107,268	1,524	66,686	16,304	39,205	55,509	4,655	337	29,066	282,586	1,291,703
Keokuk	15,075	1,716	111,484	5,830	92,846	7,774	29,409	37,183	13,228	1,493	82,639	352,525	1,364,180
Kossuth	22,231	531	129,580	5,898	98,210	18,709	42,596	61,305	4,717	6,883	15,980	434,742	1,576,876
Lee	9,321	714	44,164	452	34,106	8,665	18,553	27,218	21,151	377	131,558	254,852	1,019,942
Linn	15,950	788	108,632	1,333	86,141	17,404	39,782	57,186	8,211	1,305	50,328	379,838	1,528,252
Louisa	8,676	597	68,861	4,626	52,197	4,491	25,477	29,968	2,667	384	18,040	150,964	589,316
Lucas	8,122	1,168	38,452	97	32,853	6,387	18,624	25,011	19,655	3,946	84,342	182,345	737,071
Lyon	13,720	90	90,078	4,674	65,654	10,995	33,760	44,755	2,511	1,247	3,674	224,197	572,981
Madison	12,207	913	86,075	1,916	69,246	7,954	24,533	32,487	18,530	3,224	106,884	245,994	1,046,441
Mahaska	14,102	1,493	118,370	7,806	94,010	10,628	26,840	37,468	25,075	9,846	134,663	361,296	1,558,350

Marion	11,719	934	83,881	2,568	65,995	7,883	24,923	32,806	16,736	12,206	93,252	312,564	1,376,869
Marshall	14,155	659	100,868	4,987	76,314	11,151	33,283	44,434	12,780	9,567	69,467	259,099	1,067,176
Mills	8,360	1,107	63,989	1,452	50,794	5,286	20,323	25,609	4,945	3,802	24,925	163,354	546,317
Mitchell	10,255	123	60,252	88	47,989	12,030	33,670	45,700	2,711	4	18,864	207,007	883,987
Monona	13,090	1,647	94,395	2,605	69,337	8,648	23,987	32,635	740	804	4,421	217,778	777,515
Monroe	6,703	1,157	32,859	182	25,423	6,892	16,487	23,379	14,092	1,183	76,190	153,826	594,729
Montgomery	9,631	1,265	90,634	2,838	75,396	5,815	30,212	36,027	5,772	2,326	37,243	192,613	740,810
Muscatine	8,787	689	73,911	3,593	56,447	7,449	22,551	30,000	2,592	915	12,998	175,476	639,669
O'Brien	12,760	371	99,642	5,170	76,611	10,900	34,282	45,182	2,799	425	16,317	231,543	806,081
Osceola	8,953	126	52,253	1,648	41,820	8,717	17,900	26,617	4,382	288	22,024	147,518	541,587
Page	12,006	1,945	105,671	1,026	86,275	7,677	34,863	42,540	7,364	4,871	44,998	256,719	842,179
Palo Alto	11,008	467	60,479	2,561	48,308	10,389	19,888	30,277	3,945	1,446	15,352	211,480	666,323
Plymouth	19,164	747	170,643	9,855	129,889	12,952	54,149	67,101	4,769	6,804	15,160	324,876	944,508
Pocahontas	12,877	604	75,768	3,756	56,678	7,984	21,535	29,519	2,042	1,394	11,870	255,400	781,663
Polk	12,236	1,094	59,539	1,939	48,447	10,585	17,547	28,132	5,756	2,009	21,982	275,650	1,027,949
Pottawattamie	19,906	2,237	176,395	6,375	131,876	12,068	57,864	69,932	9,598	7,295	37,609	393,807	1,345,304
Poweshiek	14,210	1,171	116,250	3,379	96,963	8,884	33,857	42,741	7,121	1,208	46,173	272,853	1,167,057
Ringgold	10,973	1,528	54,846	32	43,725	7,805	22,916	30,721	15,234	1,447	96,191	264,202	1,225,643
Sac	13,566	866	102,554	2,436	74,095	7,503	34,951	42,454	5,300	4,112	28,616	245,063	848,909
Scott	10,326	637	98,273	5,044	66,176	14,612	28,521	43,133	1,833	225	13,906	271,153	1,142,301
Shelby	14,309	936	125,676	2,863	97,504	7,850	43,528	51,378	7,527	13,176	20,770	268,450	977,934
Sioux	18,403	278	159,216	8,450	115,829	15,819	48,567	64,386	3,351	2,189	10,763	361,015	1,284,706
Story	13,880	810	78,662	5,436	59,697	10,048	25,355	35,403	2,595	1,003	16,032	322,088	1,227,028
Tama	15,955	615	126,094	2,921	84,330	11,291	51,641	62,932	9,307	1,614	54,140	353,854	1,248,251
Taylor	11,617	1,173	80,369	1,446	61,225	6,955	23,515	30,470	20,291	1,633	127,083	262,569	981,974
Union	9,222	768	54,220	1,229	42,721	6,548	22,882	29,430	10,380	825	66,918	194,806	789,483
Van Buren	9,255	1,051	48,291	365	36,304	7,985	18,594	26,579	41,369	1,849	282,330	250,117	1,187,258
Wapello	8,609	816	52,853	1,356	42,190	8,432	13,581	22,013	17,843	567	98,339	207,180	790,949
Warren	12,025	955	74,609	914	61,793	8,920	32,673	41,593	12,869	3,129	61,254	259,665	1,016,682
Washington	13,118	1,437	133,339	5,529	104,508	6,955	28,852	35,807	9,228	2,246	59,235	296,849	1,037,229
Wayne	10,210	1,884	52,065	1,016	39,797	6,735	22,908	29,643	13,352	1,829	82,394	221,984	811,222
Webster	15,733	601	75,225	4,820	52,648	11,035	23,334	34,369	2,227	817	16,059	267,177	944,539
Winnebago	9,276	216	52,682	550	41,230	12,327	19,666	31,993	2,055	1,248	9,300	204,163	689,186
Winneshiek	14,854	117	116,590	184	70,171	26,853	43,321	70,174	7,940	656	52,584	345,681	1,300,218
Woodbury	18,114	1,591	127,372	5,658	99,377	10,880	40,857	51,737	8,587	6,229	37,668	276,650	1,116,787
Worth	8,925	82	49,636	532	38,714	13,360	25,127	38,487	2,333	413	11,397	177,552	725,088
Wright	13,409	451	79,601	914	63,220	9,492	25,381	34,873	5,883	6,202	18,107	221,539	709,638
Grand total	1,226,702	76,620	8,700,886	261,297	6,476,865	1,079,136	2,944,749	4,023,885	853,967	281,357	4,846,075	25,628,519	96,092,398

TABLE NO. 5.

Acreage and total yield of sweet corn, pop corn, timothy seed and clover seed, for the year, 1920, by counties.

Counties	Sweet Corn		Pop Corn		Timothy Seed		Clover Seed	
	Acres	Total tons green corn gathered for canning	Acres	Total pounds	Acres	Total bushels	Acres	Total bushels
Adair	68	184	2	560	4,878	19,081	1,960	1,603
Adams	12	1	11	21,450	2,493	8,672	1,770	2,039
Allamakee	--------	--------	2	1,089	4,325	22,232	2,167	2,886
Appanoose	28	1	12	11,612	14,025	55,187	495	571
Audubon	377	1,094	2	800	1,510	5,301	555	542
Benton	3,528	11,865	6	5,578	1,627	8,681	664	1,122
Black Hawk	3,315	7,084	44	19,705	864	5,083	28	47
Boone	194	463	1	520	8	35	142	107
Bremer	1,030	3,302	4	3,462	86	580	8	6
Buchanan	696	1,631	190	119,450	1,204	5,403	40	46
Buena Vista	837	2,954	164	350,815	14	76	17	8
Butler	377	779	27	34,250	534	2,755	60	42
Calhoun	1,028	4,609	146	247,250	22	96	183	130
Carroll	4	--------	71	50,551	700	3,831	1,109	1,016
Cass	860	2,369	27	60,292	888	3,429	4,360	6,549
Cedar	224	439	16	3,800	2,206	11,731	1,272	1,866
Cerro Gordo	34	10	8	3,456	298	1,014	19	32
Cherokee	3	--------	113	176,470	70	459	238	154
Chickasaw	1	--------	22	430	7,140	25,098	45	72
Clarke	4	--------	4	2,817	8,792	32,716	956	984
Clay	9	--------	187	331,320	845	3,566	211	201
Clayton	555	2,321	5	992	2,679	14,405	6,943	8,232
Clinton	20	--------	5	60	654	4,018	1,601	1,884
Crawford	--------	--------	363	645,100	912	4,289	2,511	3,458
Dallas	918	2,152	24	66,220	121	478	1,122	1,272
Davis	22	--------	5	442	17,194	57,230	1,491	1,761
Decatur	19	--------	5	1,486	12,225	42,840	597	904
Delaware	642	759	11	6,224	1,154	4,962	834	1,028
Des Moines	13	3	12	32,787	1,471	9,787	4,736	5,452
Dickinson	10	--------	223	167,450	301	1,390	46	48
Dubuque	306	668	40	42,900	1,526	8,525	3,511	4,612
Emmet	--------	--------	2	----------	5	45	6	7
Fayette	522	2,074	10	5,628	4,284	20,056	402	662
Floyd	12	--------	75	112,755	2,048	8,848	5	14
Franklin	991	3,249	19	12,908	256	1,205	22	12
Fremont	545	1,153	4	3,328	181	929	1,811	3,011
Greene	17	--------	3	5,840	138	814	317	203
Grundy	218	882	57	52,660	254	1,882	10	16
Guthrie	49	82	115	217,239	6,112	22,877	1,082	1,433
Hamilton	129	462	6	7,560	157	629	99	86
Hancock	69	140	--------	----------	76	234	20	27
Hardin	302	788	146	386,814	151	661	92	84
Harrison	4	--------	4	3,788	119	413	688	719
Henry	366	2,100	1	1,000	900	4,912	3,549	3,902
Howard	--------	--------	10	9,006	7,401	24,265	15	13
Humboldt	4	2	2	2,571	71	375	--------	--------
Ida	3	--------	5,374	10,564,548	309	1,493	532	467
Iowa	612	1,682	10	5,277	20,411	83,064	1,625	3,270
Jackson	1	2	1	776	1,754	5,244	5,857	6,022
Jasper	117	335	30	28,222	788	3,204	5,473	7,074
Jefferson	14	20	4	3,584	4,316	24,519	5,430	6,223
Johnson	202	804	24	74,490	2,873	17,050	3,206	6,273
Jones	514	1,492	131	229,363	886	4,259	1,810	1,903
Keokuk	28	26	12	10,130	3,627	17,223	2,177	3,553
Kossuth	14	--------	3	3,253	221	768	45	35
Lee	82	62	12	6,870	5,788	32,571	4,442	5,053
Linn	557	1,531	719	1,368,501	1,155	5,640	1,083	2,028
Louisa	988	2,309	1	100	959	5,624	824	1,009
Lucas	12	--------	9	6,236	10,349	35,452	982	947
Lyon	20	--------	8	5,115	88	276	35	30
Madison	230	624	9	1,989	2,116	8,028	2,888	2,868
Mahaska	140	330	7	3,500	491	2,345	4,714	6,055
Marion	339	868	4	6,044	547	2,054	4,783	4,860
Marshall	1,437	3,748	6	3,285	894	4,856	739	786

TABLE NO. 5—Continued

Acreage and total yield of sweet corn, pop corn, timothy seed and clover seed, for the year, 1920, by counties.

Counties	**Sweet Corn**		**Pop Corn**		Timothy Seed		Clover Seed	
	Acres	Total tons green corn gathered for canning	**Acres**	**Total pounds**	**Acres**	**Total bushels**	**Acres**	**Total bushels**
Mills	6	--------	--------	------------	156	779	500	518
Mitchell	8	5	196	234,865	3,512	14,612	--------	--------
Monona	90	--------	83	179,332	150	591	1,746	2,374
Monroe	6	2	4	3,180	2,767	10,276	637	685
Montgomery	299	730	17	4,001	398	1,286	5,342	7,162
Muscatine	344	688	29	38,900	943	5,692	818	754
O'Brien	6	--------	23	14,608	726	2,641	99	73
Osceola	--------	--------	22	10,560	1,083	5,328	176	122
Page	15	10	14	13,276	826	4,216	5,228	7,902
Palo Alto	3	--------	8	8,310	126	562	91	58
Plymouth	5	--------	172	47,495	142	715	796	794
Pocahontas	5	24	220	198,600	57	403	82	80
Polk	2,427	4,844	57	33,205	150	805	1,148	1,193
Pottawattamie	54	--------	4	3,735	491	2,650	3,176	4,183
Poweshiek	560	1,460	86	166,512	8,240	36,330	1,806	2,846
Ringgold	4	1	8	6,170	10,068	33,475	1,488	1,984
Sac	636	1,966	7,423	12,475,377	319	2,099	392	429
Scott	27	26	41	67,457	236	1,585	830	758
Shelby	158	559	25	6,140	856	4,349	2,926	2,949
Sioux	2	--------	4	90	202	1,067	670	681
Story	1,864	4,090	32	22,120	40	154	70	66
Tama	996	3,837	4	5,661	1,908	8,587	628	1,126
Taylor	6	1	16	19,385	3,665	14,621	2,049	3,408
Union	63	5	7	6,340	6,232	22,277	600	734
Van Buren	18	3	18	1,905	6,783	33,769	4,362	5,525
Wapello	20	12	4	2,250	2,109	10,690	2,110	2,252
Warren	11	1	6	16,702	2,182	8,893	973	966
Washington	12	9	2	2,520	1,265	7,103	4,571	6,124
Wayne	9	--------	5	5,900	25,777	81,417	1,118	1,165
Webster	2	3	40	40,000	36	162	356	412
Winnebago	764	2,335	2	1,043	67	309	10	2
Winneshiek	10	18	7	2,320	8,446	35,756	217	424
Woodbury	141	--------	97	153,940	126	666	2,286	3,848
Worth	74	284	16	14,736	732	3,557	36	92
Wright	12	--------	5	8,250	64	417	80	35
Grand total	32,329	88,366	17,267	29,366,603	261,371	1,662,604	141,890	178,912

TABLE NO. 6

Comparative Table Showing Number of Swine Lost by Cholera in Iowa by Counties in 1920, 1919, 1918, 1917, 1916, 1915 and 1913.

Counties	Swine lost by cholera, 1920	Swine lost by cholera, 1919	Swine lost by cholera, 1918	Swine lost by cholera, 1917	Swine lost by cholera, 1916	Swine lost by cholera, 1915	Swine lost by cholera, 1913
Adair	2,653	1,330	2,517	2,652	2,679	5,791	32,151
Adams	2,502	1,429	1,576	1,437	2,510	6,378	12,080
Allamakee	58	461	----------	7	17	86	993
Appanoose	898	802	168	587	159	803	1,933
Audubon	617	2,327	2,777	1,715	2,557	3,628	29,716
Benton	1,712	2,680	1,775	7,918	3,025	5,994	25,770
Black Hawk	3,290	3,089	1,436	2,375	1,061	5,422	26,480
Boone	3,247	862	1,256	774	2,765	1,706	26,810
Bremer	565	514	313	309	126	2,303	8,250
Buchanan	2,028	1,012	728	244	5	434	22,117
Buena Vista	4,557	3,075	4,252	1,408	5,114	3,482	68,286
Butler	1,472	962	541	277	553	1,261	37,211
Calhoun	1,829	720	1,463	1,360	1,865	1,578	23,755
Carroll	5,883	3,148	980	2,365	4,051	4,477	39,318
Cass	3,817	3,578	6,659	2,434	5,231	9,279	42,266
Cedar	5,929	7,743	4,798	4,723	5,281	12,407	42,729
Cerro Gordo	1,840	1,429	1,955	360	1,368	1,239	43,255
Cherokee	4,893	15,995	4,055	1,895	4,497	5,003	63,223
Chickasaw	191	379	214	----------	111	2,007	16,595
Clarke	1,195	671	304	692	537	2,818	4,918
Clay	1,705	2,253	1,714	1,912	2,420	1,453	31,875
Clayton	546	1,105	326	----------	654	760	1,700
Clinton	2,940	2,243	1,019	131	889	2,198	19,999
Crawford	5,414	5,881	4,963	5,343	9,354	9,648	71,865
Dallas	922	1,707	4,963	1,902	1,678	2,311	18,436
Davis	170	218	46	----------	66	1,704	280
Decatur	579	203	324	294	835	2,901	1,237
Delaware	2,390	1,517	1,047	2,175	374	1,255	33,348
Des Moines	1,266	4,502	1,679	988	1,731	7,180	9,353
Dickinson	480	1,466	509	333	731	868	17,716
Dubuque	566	911	1,031	927	1,557	4,257	23,299
Emmet	908	2,126	2,001	978	1,679	1,873	18,505
Fayette	202	337	197	120	351	528	6,158
Floyd	1,771	531	1,239	832	470	882	18,046
Franklin	2,174	2,068	2,520	999	896	5,690	31,367
Fremont	2,153	2,779	4,147	3,622	2,836	7,065	7,271
Greene	1,263	2,362	1,819	3,556	1,829	1,790	26,568
Grundy	2,506	5,622	1,439	2,599	1,031	2,962	23,618
Guthrie	2,871	4,696	3,677	1,630	3,460	3,050	30,932
Hamilton	3,315	2,481	3,119	3,216	2,294	2,385	35,526
Hancock	3,332	1,554	1,369	285	284	1,656	38,672
Hardin	5,695	1,824	2,039	1,777	2,292	5,707	28,015
Harrison	2,099	5,467	4,589	2,243	4,084	7,872	20,122
Henry	1,239	1,018	901	675	977	5,033	2,861
Howard	625	415	185	5	60	1,073	7,223
Humboldt	1,868	1,970	1,966	1,142	3,129	2,372	46,225
Ida	5,588	5,437	3,560	3,634	3,031	4,168	52,358
Iowa	4,119	4,897	2,810	2,035	4,250	8,939	3,656
Jackson	----------	244	90	180	322	1,453	3,502
Jasper	7,874	7,874	6,139	6,400	3,207	9,380	48,499
Jefferson	857	1,552	1,058	129	506	3,719	3,207
Johnson	4,811	6,916	6,448	3,079	4,519	14,139	17,646
Jones	1,524	1,395	779	1,883	1,007	4,563	9,470
Keokuk	5,830	6,614	1,693	658	2,131	13,659	20,620
Kossuth	5,898	7,344	7,185	2,429	2,707	2,757	78,295
Lee	452	263	469	143	354	3,860	6,978
Linn	1,333	3,811	1,754	1,124	1,463	3,186	24,196
Louisa	4,626	3,697	2,382	2,167	6,320	11,129	12,665
Lucas	97	675	704	32	203	2,523	1,001
Lyon	4,674	5,688	3,408	5,226	4,886	5,701	70,181
Madison	1,916	1,700	6,332	1,110	1,712	6,305	16,584
Mahaska	7,806	8,666	4,054	2,791	4,311	21,574	30,899
Marion	2,568	4,532	7,531	3,159	3,063	8,491	27,030

TABLE NO. 6—Continued

Comparative Table Showing Number of Swine Lost by Cholera in Iowa by Counties in 1920, 1919, 1918, 1917, 1916, 1915 and 1913.

Counties	Swine lost by cholera, 1920	Swine lost by cholera, 1919	Swine lost by cholera, 1918	Swine lost by cholera, 1917	Swine lost by cholera, 1916	Swine lost by cholera, 1915	Swine lost by cholera, 1913
Marshall	4,987	9,079	1,219	2,000	4,642	6,454	48,293
Mills	1,452	6,617	2,784	1,879	2,153	4,249	16,632
Mitchell	88	84	----------	234	174	1,368	13,810
Monona	2,605	5,277	2,185	1,853	1,574	4,961	37,085
Monroe	182	35	141	86	33	1,313	1,644
Montgomery	2,838	2,602	2,820	2,816	2,461	6,882	28,403
Muscatine	3,593	4,265	2,380	718	2,372	4,276	11,702
O'Brien	5,170	3,251	2,490	2,179	4,761	2,635	58,865
Osceola	1,648	2,734	1,036	1,066	824	399	36,620
Page	1,026	1,528	1,860	4,181	3,711	15,192	30,809
Palo Alto	2,561	3,123	2,338	2,017	3,779	1,701	46,260
Plymouth	9,855	19,067	8,050	6,748	10,610	6,875	105,055
Pocahontas	3,756	3,283	4,701	1,469	3,469	2,318	38,651
Polk	1,939	3,706	3,483	3.276	3,117	4,648	20,937
Pottawattamie	6,375	6,991	8,294	9,542	12,164	21,376	42,065
Poweshiek	3,379	1,317	2,141	1,622	2,035	8,301	24,902
Ringgold	32	244	157	263	135	2,066	8,625
Sac	2,436	3,519	2,051	1,601	4,966	4,691	67,715
Scott	5,044	13,937	3,320	1,098	3,104	4,061	21,860
Shelby	2,863	3,922	2,645	2,593	3,462	7,120	25,118
Sioux	8,450	8,363	12,025	6,192	13,587	11,570	123,101
Story	5,436	3,938	3,155	2,458	4,032	3,118	27,672
Tama	2,921	5,109	2,683	3,897	3,175	8,148	31,407
Taylor	1,446	1,304	1,032	1,876	760	5,031	18,062
Union	1,229	576	629	978	1,015	3,585	7,377
Van Buren	365	479	134	5	712	2,785	2,844
Wapello	1,356	2,779	984	1,288	1,754	6,634	7,606
Warren	914	2,552	783	806	848	4,486	18,270
Washington	5,529	9,197	4,158	5,597	5,917	11,696	24,433
Wayne	1,016	252	513	89	222	3,245	10,487
Webster	4,820	146	1,598	499	2,284	1,697	40,381
Winnebago	550	1,429	607	494	186	2,179	14,639
Winneshiek	184	612	104	333	2,224	1,999	3,543
Woodbury	5,658	12,385	14,749	7,707	6,624	9,819	61,998
Worth	532	881	137	439	317	1,503	16.427
Wright	914	3,677	3,568	1,616	1,134	2,216	49,718
Grand total	261,297	328,227	243,945	188,909	247,802	476.712	2.709.870

PART X

Statistical Tables of Iowa's Principal Farm Crops. Also Statistical Tables of the Principal Farm Crops and Live Stock by States, the United States and the World.

CORN

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1880	5,625,200	41.0	230,633,200	$ .25	$ 57,658,300
1885	6,803,834	33.0	224,636,522	.23	51,666,400
1890	8,550,827	28.0	239,675,156	.41	98,266,814
Statistics compiled from reports of the Iowa Weather and Crop Service					
1896	8,043,390	39.0	313,692,210	.14	43,916,909
1897	8,253,522	29.0	239,452,150	.17	40,706,865
1898	8,396,286	34.5	289,214,850	.23	66,519,415
1899	8,460,521	36.3	306,852,714	.23	70,576,124
1900	8,618,660	40.3	345,055,040	.27	93,164,860
1901	8,687,480	26.2	227,908,850	.50	113,954,425
1902	8,700,000	34.1	296,950,230	.28	83,146,064
1903	7,398,320	31.2	230,511,310	.36	82,984,071
1904	9,000,000	36.0	323,853,330	.35	113,348,665
1905	9,285,150	37.2	345,871,840	.35	121,055,144
1906	9,443,960	41.1	388,348,920	.33	128,155,143
1907	8,327,690	29.6	246,898,460	.44	108,635,322
1908	8,399,610	35.9	301,873,150	.51	153,955,306
Statistics of township assessors; values by Iowa Weather and Crop Service					
1909	8,681,850	35.5	308,036,868	.51	157,098,802
1910	8,399,712	39.8	334,374,428	.36	120,374,794
1911	8,863,331	36.9	326,661,430	.54	176,397,172
1912	9,420,434	44.5	419,097,329	.36	150,875,038
1913	9,180,774	37.3	342,158,425	.59	201,873,470
1914	9,794,437	40.5	397,117,376	.55	218,414,557
1915	9,747,846	27.5	267,903,738	.45	120,556,682
1916	9,479,030	35.0	331,582,186	.81	268,581,571
1917	10,370,727	35.8	371,639,819	.97	360,490,624
1918	9,309,234	34.1	317,544,351	1.23	390,579,552
1919	9,684,651	41.7	404,473,723	1.17	473,234,256
1920	10,254,589	46.0	471,533,116	.47	221,620,564
Average for 25 years	8,968,048	36.2	325,944,233	$ .50	$ 163,208,616

WHEAT

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage all wheat	WINTER WHEAT			SPRING WHEAT			Total yield all wheat bushels	Total value all wheat
		Average yield per acre bushels	Total yield bushels	Average farm value per bushel, December 1st.	Average yield per acre bushels	Total yield bushels	Average farm value per bushel December 1st		
1880	3,437,948	--------	--------	--------	10.5	--------	$ .82	36,099,760	$ 29,501,803
1885	2,648,009	--------	--------	--------	12.0	--------	.61	31,776,108	19,383,426
1890	2,092,896	--------	--------	--------	11.7	--------	.78	25,114,552	19,589,350

WHEAT

Statistics compiled from reports of the Iowa Weather and Crop Service

Year	Acreage all wheat	WINTER WHEAT			SPRING WHEAT			Total yield all wheat bushels	Total value all wheat
		Average yield per acre bushels	Total yield bushels	Average farm value per bushel, December 1st.	Average yield per acre bushels	Total yield bushels	Average farm value per bushel December 1st		
1896	739,245	17.0	3,351,550	.60	13.0	7,047,235	$ .57	10,398,785	$ 6,027,854
1897	1,094,364	13.0	1,671,454	.74	13.4	12,941,600	.74	14,613,054	10,813,660
1898	1,484,682	16.5	3,168,916	.55	14.8	19,152,352	.52	22,321,268	11,702,127
1899	1,566,818	11.3	226,040	.58	12.7	19,574,792	.54	19,800,832	10,701,491
1900	1,494,281	13.3	1,018,070	.62	14.3	20,280,280	.60	21,298,350	12,799,371
1901	1,188,457	17.6	865,770	.60	15.3	17,429,230	.60	18,295,000	10,977,000
1902	1,022,782	18.0	852,045	.55	13.0	12,680,800	.52	13,535,845	7,062,641
1903	837,422	16.9	1,435,380	.70	12.6	9,481,350	.65	10,916,730	7,167,644
1904	846,070	14.3	1,017,000	.92	9.1	7,080,430	.86	8,097,430	7,024,810
1905	420,069	20.2	1,253,020	.72	14.4	5,155,760	.72	6,408,780	4,614,321
1906	439,152	23.0	1,566,050	.67	15.0	5,603,880	.63	7,169,930	4,579,698
1907	421,125	19.8	1,698,101	.83	13.0	4,402,320	.81	6,100,421	4,975,302
1908	408,614	19.7	1,678,540	.86	15.4	4,968,250	.86	6,646,790	5,716,239

WHEAT

Statistics of township assessors; values by Iowa Weather and Crop Service

Year	Acreage all wheat	WINTER WHEAT			SPRING WHEAT			Total yield all wheat bushels	Total value all wheat
		Average yield per acre bushels	Total yield bushels	Average farm value per bushel, December 1st.	Average yield per acre bushels	Total yield bushels	Average farm value per bushel December 1st		
1909	502,762	18.2	3,621,953	.92	12.5	3,809,460	.90	7,431,413	6,760,711
1910	546,179	18.5	3,635,405	.86	19.3	6,773,799	.86	10,409,204	8,951,915
1911	897,803	17.9	6,451,921	.93	11.6	6,238,242	.86	12,690,163	11,365,175
1912	887,309	23.0	11,460,943	.78	14.6	5,702,539	.76	17,163,482	13,273,466
1913	802,006	23.2	12,210,812	.77	15.0	4,137,995	.75	16,348,807	12,505,821
*1914	917,309	21.6	13,344,394	.97	13.0	3,893,669	.94	17,238,063	16,604,111
1915	735,055	18.5	10,872,248	.83	13.8	2,040,472	.85	12,912,720	10,758,366
1916	468,641	15.6	4,621,073	1.58	12.2	2,111,771	1.54	6,732,844	10,553,422
1917	315,923	14.6	2,211,817	1.97	19.2	3,177,908	1.94	5,389,725	10,522,420
1918	919,023	17.7	5,481,167	2.02	17.3	10,527,209	1.99	16,008,376	32,021,102
1919	1,434,391	16.9	14,664,756	1.98	9.2	5,241,421	1.89	19,906,177	38,942,501
1920	595,911	19.8	8,953,061	1.41	11.0	1,578,269	1.35	10,531,330	14,754,479
Average for 25 years	839,416	17.8	4,693,259	$ .96	13.8	8,041,241	$ .93	12,734,621	$ 11,647,026

*State census; apportionment to winter and spring wheat made on basis of relative acreage and production reported by Iowa Weather and Crop Service.

OATS

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1880	1,179,680	35.0	42,288,800	$ .23	$ 9,496,424
1885	2,207,320	32.5	71,737,900	.21	15,064,959
1890	2,758,715	29.0	80,002,735	.38	30,401,039

Statistics compiled from reports of the Iowa Weather and Crop Service

1896	2,825,000	26.0	73,450,000	.12	8,814,000
1897	4,405,782	30.0	132,571,000	.16	21,211,384
1898	4,299,243	32.5	139,915,840	.21	29,383,220
1899	4,069,557	34.5	140,647,309	.19	26,722,988
1900	3,991,690	34.7	138,832,830	.20	27,766,466
1901	3,799,220	30.2	114,883,530	.35	40,209,235
1902	2,997,031	31.0	92,907,960	.24	22,297,900
1903	3,822,882	25.9	99,012,660	.30	29,703,798
1904	4,018,980	29.4	118,435,570	.26	30,793,284
1905	4,332,522	33.8	146,439,240	.25	36,609,810
1906	4,166,800	34.0	142,036,580	.27	38,349,878
1907	4,536,170	24.5	111,190,400	.39	43,364,256
1908	4,431,650	25.5	112,830,490	.43	48,517,110

OATS

Statistics of township assessors; values by Iowa Weather and Crop Service

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1909	4,312,134	27.0	117,083,850	.35	40,979,347
1910	4,697,749	36.0	169,207,098	.27	45,685,916
1911	4,730,687	25.8	122,474,893	.41	50,214,706
1912	4,874,752	42.6	207,819,162	.27	56,111,174
1913	5,205,978	35.4	184,500,993	.27	49,815,268
1914	5,285,440	33.7	178,330,591	.34	60,632,401
1915	4,985,014	37.8	188,720,529	.41	77,375,417
1916	5,199,269	36.5	189,876,501	.49	93,039,485
1917	5,410,031	42.1	227.743,960	.61	138,923,816
1918	5,822,869	39.4	229,233,636	.64	146,709,148
1919	5,565,630	34.7	193,342,151	.64	123,738,977
1920	5,833,474	39.1	227,849,078	.36	82,025,668
Average for 25 years	4,544,782	32.9	151,973,370	$ .34	$ 54,759,786

BARLEY

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1880	200,000	23.0	4,600,000	$ .42	$ 1,932,000
1885	212,485	27.0	5,737,095	.33	1,893,241
1890	152,682	24.0	3,664,368	.47	1,722,254

Statistics compiled from reports of the Iowa Weather and Crop Service

1896	547,642	29.0	15,881,618	.20	3,176,324
1897	551,867	25.5	14,076,856	.23	3,237,677
1898	509,589	27.7	14,138,011	.30	4,241,403
1899	557,598	26.4	14,719,311	.30	4,415,579
1900	501,740	25.3	12,695.200	.33	4,189,416
1901	604,610	24.2	14,654,410	.44	6,447,940
1902	594,070	25.0	15,380,940	.33	5,075,710
1903	493,108	24.7	12,179,790	.37	4,506,522
1904	493,370	25.0	12,317,710	.34	4,188,021
1905	565,700	27.5	15,566,770	.33	5,137,034
1906	558,870	26.5	14,858,830	.36	5,349,178
1907	397,210	24.6	9,893,330	.60	5,935,998
1908	397,408	26.7	10,629,660	.50	5,314,830

Statistics of township assessors; values by Iowa Weather and Crop Service

1909	562,622	18.4	10,352,040	.46	4,761,938
1910	324,571	25.9	8,614,541	.56	4,824,143
1911	313,472	19.5	6,106,239	.90	5,495,615
1912	389,410	28.5	11,100,558	.50	5,550,279
1913	458,743	20.8	9,550,482	.53	5,061,755
1914	300,062	24.9	7,463,395	.56	4,179,501
1915	202,823	31.3	6,359,171	.51	3,243,177
1916	265,048	28.2	7,467,049	.90	6,720,344
1917	305,429	34.6	10,578,090	1.15	12,164,804
1918	537,975	28.4	15,278,490	.89	13,597,856
1919	234,779	24.0	5,749,847	1.11	6,382,330
1920	175,691	27.4	4,809.798	.63	3,030,173
Average for 25 years	433,736	26.0	11,216,885	$ .53	$ 5,449,102

RYE

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1880	41,000	14.0	574,000	$ .38	$ 218,120
1885	114,000	15.0	1,710,000	.42	718,200
1890	100,560	16.0	1,608,960	.51	820,570

Statistics compiled from reports of the Iowa Weather and Crop Service

1896	121,670	16.0	1,946,720	.25	486,680
1897	226,198	15.0	3,490,344	.34	1,186,716
1898	210,309	16.0	3,370,550	.38	1,280,809
1899	126,236	16.3	2,061,169	.40	824,467
1900	103,680	15.6	1,621,630	.43	697,300
1901	54,390	15.8	859,630	.48	412,622
1902	51,931	17.0	882,830	.40	353,132
1903	123,273	15.6	1,923,060	.44	846,146
1904	99,590	15.0	1,517,090	.54	819,228
1905	71,305	18.0	1,283,500	.52	667,420
1906	62,530	17.5	1,093,160	.48	524,717
1907	52,450	17.0	900,060	.61	549,036
1908	50,893	17.1	869,072	.63	547,515

Statistics of township assessors; values by Iowa Weather and Crop Service

1909	41,606	13.4	556,846	.60	334,108
1910	29,502	13.8	407,058	.61	248,305
1911	44,157	15.1	668,443	.79	528,070
1912	73,315	18.0	1,322,382	.61	806,653
1913	74,599	15.8	1,179,307	.59	695,791
1914	71,979	14.2	1,025,201	.77	789,405
1915	62,365	14.2	886,473	.77	682,584
1916	36,886	12.5	461,210	1.15	530,392
1917	48,404	14.6	706,594	1.58	1,116,419
1918	69,395	12.4	860,393	1.48	1,273,382
1919	86,901	15.9	1,388,761	1.33	1,847,052
1920	39,268	16.1	631,370	1.17	738,703
Average for 25 years	81,313	15.5	1,276,514	$ .69	$ 751,466

POTATOES

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1880	107,000	95.0	10,165.000	$ .35	$ 3.557,750
1885	157,000	82.0	12,874,000	.40	5,149,600
1890	170,048	49.0	8,332,352	.81	6,749.205

Statistics compiled from reports of the Iowa Weather and Crop Service

1896	170,285	87.0	14,814,795	.21	3,111,106
1897	163,248	61.6	10,051,919	.45	4,523,363
1898	164,456	76.0	12,538,411	.31	3,886,907
1899	154,243	98.8	15,252,934	.24	3,660,704
1900	149,680	73.0	10,850,960	.40	4,340,330
1901	136,300	37.4	5,098,460	.90	4,588,614
1902	138,484	87.1	12,051,670	.34	4,097,567
1903	113,433	53.8	6,082,694	.75	4,562,020
1904	113,250	125.0	14,255,680	.28	3,991,590
1905	111,335	84.0	9,352,190	.50	4,676,095
1906	115,310	101.0	11,697,500	.48	5,614,800
1907	117,350	84.0	9,847,430	.62	6,105,406
1908	118,517	89.9	10,658,290	.59	6,288,391

Statistics of township assessors; values by Iowa Weather and Crop Service

1909	138,139	90.0	12,427.595	.53	6,586,625
1910	132,640	75.3	9,986,881	.48	4,793,703
1911	117,943	77.0	9,125,747	.71	6,479,280
1912	120,035	93.9	11,277,537	.44	4,962,116
1913	112,314	52.2	5,865,140	.85	4,985,369
1914	85,931	98.4	8,453,843	.87	7,354.843
1915	99,636	82.5	8,218,471	.53	4,355,790
1916	88,691	46.6	4,132,494	1.75	7,231,865
1917	100,246	85.4	8,561,511	1.32	11,301,195
1918	96,656	73.3	7,082,480	1.32	9,348,874
1919	78,381	43.2	3,387,090	1.94	6,570,954
1920	65,560	111.9	7,333,437	1.22	8,946,793
Average for 25 years	120,083	79.5	9,536,204	$ .72	$ 5,694,573

FLAX

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage	Average yield per acre	Total yield bushels	Average farm value per bushel December 1st.	Total value
1880	103,420	10.0	1,034,200	$ 1.00	$ 1,034,200
1885	--------	--------	--------------	.94	2,563,293
1890	283,722	10.5	2,929,081	1.10	3,221,989

Statistics compiled from reports of the Iowa Weather and Crop Service

1896	199,128	9.5	1,891,716	.60	1,135,029
1897	249,882	10.0	2,498,600	.87	2,173,782
1898	225,014	10.5	2,376,604	.80	1,901,283
1899	142,175	11.2	1,597,979	1.04	1,661,898
1900	108,850	11.2	1,222,980	1.50	1,834,470
1901	104,140	8.8	916,890	1.29	1,182,788
1902	94,767	8.0	755,350	1.00	755,350
1903	40,823	8.7	355,160	.78	277,024
1904	51,370	11.0	591,140	1.15	679,811
1905	17,732	9.8	173,770	.90	156,393
1906	19,160	10.7	205,280	.97	199,122
1907	42,790	10.8	461,960	.98	452,721
1908	40,833	11.3	461,580	1.01	466,195

Statistics of township assessors; values by Iowa Weather and Crop Service

1909	17,365	10.0	173,650	1.29	224,009
1910	19,821	8.6	170,287	2.28	388,482
1911	39,334	4.6	178,717	2.00	357,434
1912	24,121	9.9	238,442	1.31	312,359
1913	15,462	7.9	121,869	1.36	165,742
1914	15,515	7.4	114,540	1.21	138,593
1915	6,486	6.9	44.743	1.57	70,247
1916	7,658	8.5	65,196	2.06	134,304
1917	8,384	9.9	82,734	2.87	237,447
1918	14,973	8.2	123,077	3.26	401,231
1919	11,372	9.4	107,068	3.90	417,565
1920	10,951	10.5	114,844	1.80	206,749
Average for 25 years	61,126	9.3	601,774	$ 1.51	$ 637,266

HAY

Statistics compiled from reports of Secretary of Iowa Agricultural Society

Year	Acreage all hay	TAME HAY			WILD HAY			Total yield all hay, tons	Total value all hay
		Average yield per acre, tons	Total yield, tons	Average farm value per ton December 1st.	Average yield per acre, tons	Total yield, tons	Average farm value per ton, December 1st.		
*1880									
*1885									
1890	3,327,577	1.5	4,991,335	$ 6.84					$ 34,140,731

HAY

Statistics compiled from reports of the Iowa Weather and Crop Service

Year	Acreage all hay	TAME HAY			WILD HAY			Total yield all hay, tons	Total value all hay
		Average yield per acre, tons	Total yield tons	Average farm value per ton December 1st.	Average yield per acre tons	Total yield, tons	Average farm value per ton December 1st.		
1896	3,800,960	1.5	3,376,440	4.50	1.5	2,325,000	$ 3.30	5,701,440	$ 22,866,480
1897	3,593,060	1.6	3,362,287	4.50	1.3	1,939,117	3.70	5,301,404	22,305,025
1898	3,637,395	1.7	3,852,561	4.30	1.2	1,645,419	3.50	5,497,980	22,324,978
1899	3,742,655	1.5	3,852,941	5.75	1.2	1,458,195	4.90	5,311,136	29,299,567
1900	3,597,137	1.4	3,609,010	6.50	1.1	1,153,050	5.00	4,762,060	29,204,315
1901	3,709,560	1.4	3,711,680	8.25	1.2	1,268,700	6.30	4,980,380	38,614,170
1902	3,440,277	1.8	4,439,940	6.80	1.3	1,202,860	5.50	5,642,800	36,807,322
1903	3,661,895	1.9	5,216,404	5.75	1.3	1,191,345	4.95	6,407,749	35,891,480
1904	3,707,215	1.5	4,499,090	5.62	1.2	1,091,590	4.50	5,590,680	30,197,040
1905	4,692,925	1.8	6,477,300	5.50	1.2	1,313,310	4.50	7,790,610	41,535,045
1906	4,418,600	1.3	4,892,950	7.50	1.2	1,110,690	5.50	6,003,640	42,805,920
1907	4,268,730	1.5	5,117,878	8.50	1.3	1,172,590	6.75	6,290,468	51,316,945
1908	4,121,432	1.8	5,838,640	6.16	1.6	1,445,980	5.09	7,284,620	43,326,060
1909	4,352,295	1.7	5,828,580	7.42	1.4	1,219,630	5.90	7,048,210	50,443,880

HAY

Statistics of township assessors; values by Iowa Weather and Crop Service

Year	Acreage all hay	TAME HAY			WILD HAY			Total yield all hay, tons	Total value all hay
		Average yield per acre, tons	Total yield tons	Average farm value per ton December 1st.	Average yield per acre tons	Total yield, tons	Average farm value per ton December 1st.		
1910	4,267,725	1.1	3,876,844	9.75	1.1	807,280	9.75	4,684,124	45,670,209
1911	3,940,384	0.8	2,544,088	13.44	0.8	662,866	10.28	3,206,954	41,006,804
1912	3,390,118	1.2	3,138,940	9.89	1.1	836,735	7.43	3,975,675	37,261,058
1913	3,682,178	1.2	3,568,590	9.93	1.1	794,142	8.80	3,754,102	42,424,549
1914	3,938,961	1.2	3,932,650	10.78	1.1	767,089	8.26	4,699,739	44,308,851
1915	3,831,387	1.4	4,673,655	8.94	1.1	588,918	7.41	5,262,573	46,146,358
1916	3,702,855	1.4	4,324,165	9.00	1.2	645,709	7.89	4,969,874	44,012,129
1917	3,286,061	1.1	3,209,412	18.82	1.1	598,177	14.79	3,807,589	69,248,172
1918	3,182,728	1.1	3,010,684	19.57	1.1	511,711	16.00	3,422,395	67,106,461
1919	3,228,356	1.6	4,534,032	18.37	1.3	663,152	16.48	5,197,184	94,218,911
1920	3,356,292	1.4	4,138,001	16.24	1.3	611,280	12.69	4,749,281	74,958,279
Average for 25 years	3,782,047	1.4	4,201,070	$ 9.27	1.2	1,080,981	$ 7.57	5,253,707	$ 44,308,851

*No authentic data obtainable.

STATISTICS OF CROPS, 1920

COMPILED IN THE U. S. BUREAU OF CROP ESTIMATES.

CORN.

TABLE 1.—Acreage, production, and total farm value, by States, 1919 and 1920.

State	Thousands of acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1920	1919	1920	1919	1920	1919
	Acres	Acres	Bushels	Bushels	Dollars	Dollars
Maine	5	5	226	300	289	585
New Hampshire	9	11	405	512	587	870
Vermont	25	22	1,175	1,034	1,480	1,810
Massachusetts	21	26	840	1,508	1,050	2,594
Rhode Island	8	8	320	360	576	670
Connecticut	44	50	1,804	2,900	2,526	5,220
New York	795	820	32,595	35,260	37,810	58,532
New Jersey	260	260	11,440	10,400	9,724	15,912
Pennsylvania	1,490	1,536	67,050	72,192	67,050	106,122
Delaware	190	195	7,125	5,850	5,344	8,482
Maryland	670	680	25,795	27,880	20,894	39,032
Virginia	1,670	1,670	50,100	46,760	50,100	79,024
West Virginia	650	650	22,100	22,100	25,636	36,244
North Carolina	2,784	2,800	64,032	53,200	72,356	98,420
South Carolina	2,230	2,270	42,370	36,320	49,149	71,550
Georgia	5,100	4,820	76,500	69,890	80,325	111,824
Florida	780	830	10,530	12,450	10,530	17,430
Ohio	3,735	3,668	162,099	161,392	110,227	195,284
Indiana	4,545	4,500	184,072	166,500	108,602	208,125
Illinois	8,652	8,400	294,168	294,000	173,559	382,200
Michigan	1,625	1,625	65,000	65,000	53,300	89,700
Wisconsin	1,960	1,845	86,044	86,715	66,254	108,394
Minnesota	3,150	2,900	118,125	116,000	60,244	139,200
Iowa	10,300	10,000	473,800	416,000	222,686	499.200
Missouri	6,215	5,650	198,880	152,550	127,283	210,519
North Dakota	711	508	17,064	16,764	12,286	23,470
South Dakota	3,520	3,200	105,600	91,200	44,352	108,528
Nebraska	7,560	7,030	255,528	184,186	104,766	224,707
Kansas	5,190	4,100	137,535	62,320	60,515	87,248
Kentucky	3,300	3,300	100,650	82,500	82,533	127.875
Tennessee	3,325	3,300	93,100	70,620	80,997	110,873
Alabama	4,277	4,334	67,149	62,843	65,806	99,920
Mississippi	3,980	3,980	63,680	59,700	64,954	95,520
Louisiana	1,906	1,850	36,595	32,375	31,106	48,562
Texas	6,700	6,500	174,200	195,000	146,328	230,100
Oklahoma	3,190	2,900	89,320	69,600	48,233	88,392
Arkansas	2,360	2,407	55,224	43,326	53,567	71,055
Montana	179	128	3,580	1,728	2,864	2,851
Wyoming	65	50	1,560	800	874	1,320
Colorado	843	704	17,450	11,757	12,215	16,695
New Mexico	270	243	7,155	7,290	7,870	11,008
Arizona	28	30	644	900	1,095	1,800
Utah	24	18	521	324	782	486
Nevada	1	1	33	30	53	42
Idaho	45	35	1,800	1,225	1,800	2,021
Washington	78	78	2,808	2,808	3,510	5,195
Oregon	46	45	1,426	1,170	1,854	1,814
California	90	90	3,150	2,970	3,780	5,316
United States	104,601	100,072	3,232,367	2,858,509	2,189,721	3,851,741

CORN—Continued.

TABLE 2.—Area in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
NORTH AMERICA	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
United States	104,229	103,435	106,197	105,296	116,730	104,467	100,072	104,601
Canada:								
Ontario	291	239	237	160	160	195	221	244
Quebec	24	17	16	13	74	55	44	48
Total Canada	315	256	253	173	234	250	265	292
Mexico	11,554	[2] 4,748	---------	[2] 2,765	---------	[2] 3,974	---------	---------
Total	116,098	---------	---------	---------	---------	---------	---------	---------
SOUTH AMERICA								
Argentina	8,128	10,260	10,386	9,928	8,969	8,715	9,800	8,184
Chile	56	59	80	66	49	65	65	---------
Uruguay	551	692	787	697	627	590	552	495
Total	8,735	11,011	11,253	10,691	9,645	9,370	10,417	---------
EUROPE								
Austria	[3] 761	[4] 469	[5] 497	[6] 362	121	113	104	---------
Hungary proper [3]	6,038	6,129	6,194	---------	---------	---------	---------	[7] 1,894
Croatia Slavonia [3]	1,036	---------	---------	---------	---------	---------	---------	---------
Bosnia Herzegovina [3]	578	---------	---------	---------	---------	---------	---------	---------
Bulgaria [3]	1,544	1,571	1,579	1,342	1,385	1,455	[7] 1,392	[7] 1,419
Czecho-Slovakia	---------	---------	---------	---------	---------	---------	[8] 36	292
France [3]	1,155	1,128	935	812	847	754	736	792
Italy	3,931	3,894	3.887	3,918	3,853	3,558	3,709	3,707
Jugo-Slavia	---------	---------	---------	---------	---------	---------	---------	3,018
Portugal	---------	---------	590	---------	---------	---------	---------	---------
Roumania [3]	5,143	5,104	5,207	5,056	---------	[9] 5,728	[10] 6,751	[11] 7,330
Russia proper [3]	3,173	3,186	2,717	2,865	---------	---------	---------	---------
Northern Caucasia [3]	750	834	917	---------	---------	---------	---------	---------
Serbia [3]	1,445	---------	---------	---------	---------	---------	---------	---------
Spain	1,134	1,137	1,152	1,154	1,175	1,169	1,179	1,167
Switzerland	---------	3	3	4	5	7	6	6
Total	26,688	---------	---------	---------	---------	---------	---------	---------
ASIA								
British India	6,340	6,146	6,144	6,679	6,518	6,442	5,994	---------
Japan	130	141	143	144	138	141	137	139
Philippine Islands	992	1,041	1,095	1,069	1,058	1,034	1,064	---------
Total	7,462	7,328	7,382	7,892	7,714	7,617	7,195	---------
AFRICA								
Algeria	34	32	---------	---------	20	---------	15	22
Tunis	43	44	57	40	46	36	45	30
Egypt	1,857	1,889	1,846	1,740	1,685	1,812	1,896	---------
Morocco	---------	---------	625	355	354	405	---------	---------
Union of South Africa	---------	---------	2,562	2,740	3,150	3,300	3,952	3,122
Total	1,934	---------	---------	---------	5,255	---------	---------	---------

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[1] Five-year average, except in a few cases where five-year statistics were not available.

[2] Unofficial.

[3] Old boundaries.

[4] Excludes Galicia and Bukowina.

[5] Includes Galicia and Bukowina; excludes Goritz and Gradisca.

[6] Includes Galicia; excludes Bukowina, Goritz and Gradisca.

[7] New boundaries.

[8] Moravia only.

[9] Includes Bessarabia, but excludes Dobrudja.

[10] Former Kingdom, Bessarabia, and Bukowina.

[11] Former Kingdom, Bessarabia, Bukowina, and Transylvania.

CORN—Continued.

TABLE 2.—Area in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
AUSTRALASIA								
Australia:								
Queensland	143	157	176	146	181	165	150	---------
New South Wales	190	157	144	154	155	146	115	---------
Victoria	18	18	19	22	23	21	22	---------
Western Australia	---------	(2)	(2)	(2)	(2)	(2)	(2)	---------
South Australia	1	(2)	(2)	1	(2)	(2)	(2)	---------
Total	352	332	339	323	359	332	287	---------
New Zealand	10	6	5	8	6	8	10	---------
Total Australasia	362	338	344	331	365	340	297	---------
Grand total	161,279	---------	---------	---------	---------	---------	---------	---------

[1] Five-year average, except in a few cases where five-year statistics were not available.
[2] Less than 500 acres.

TABLE 3.—Production in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
NORTH AMERICA	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
United States	2,708,334	2,672,804	2,994,793	2,566,927	3,065,233	2,502,665	2,858,509	3,232,367
Canada								
Ontario	17,436	13,410	13,860	5,960	5,960	13,015	15,152	12,915
Quebec	736	514	508	322	1,803	1,190	1,788	1,420
Other	6	---------	---------	---------	---------	---------	---------	---------
Total	18,178	13,924	14,368	6,282	7,763	14,205	16,940	14,335
Mexico	164,657	78,443	60,000	132,823	---------	75,985	---------	---------
Total	2,891,169	2,765,171	3,069,161	2,706,032	---------	2,592,855	---------	---------
SOUTH AMERICA								
Argentina	174,502	263,135	338,235	161,133	58,839	170,660	240,144	258,686
Chile	1,390	1,505	1,842	1,570	1,338	1,446	1,702	1,689
Uruguay	6,027	7,142	11,382	4,604	6,815	7,086	6,574	2,784
Total	181,919	271,782	351,459	167,307	66,992	179,192	248,420	263,159
EUROPE								
Austria	[2] 14,536	[3] 10,771	[3] 8,050	---------	2,810	2,291	2,115	---------
Hungary proper [2]	168,081	172,308	180,550	---------	---------	---------	---------	[4] 48,319
Croatia Slavonia [2]	24,873	25,000	25,000	---------	---------	---------	---------	---------
Bosnia Herzegovina [2]	9,111	7,000	7,000	---------	---------	---------	---------	---------
Bulgaria [2]	28,219	30,901	29,821	17,471	17,780	8,144	[4] 39,412	[4] 39,650
Czecho-Slovakia	---------	---------	---------	---------	---------	---------	[5] 448	6,299
France [2]	22,229	22,530	17,104	16,635	14,902	9,760	[6] 9,976	[6] 16,793
Italy	100,349	104,966	121,824	81,547	82,771	76,590	85,846	86,661
Jugo-Slavia	---------	---------	---------	---------	---------	---------	---------	86,555
Portugal	15,000	15,000	9,275	---------	---------	---------	---------	---------
Roumania [2]	100,620	102,552	86,412	---------	---------	---------	[7] 137,412	[8] 92,950

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.
[2] Old boundaries.
[3] Excludes Galicia and Bukowina.
[4] New boundaries.
[5] Moravia only.
[6] Excludes Alsace-Lorraine.
[7] Former Kingdom, Bessarabia, and Bukowina.
[8] Former Kingdom and Bessarabia.

CORN—Continued.

TABLE 3.—Production in undermentioned countries, 1909-1920—Con.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
EUROPE—Con.	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Russia proper [2]	56,571	61,670	44,663	62,207	----------	----------	----------	----------
Northern Caucasia [2]	13,651	19,241	18,520	----------	----------	----------	----------	----------
Serbia [2]	28,128	20,000	12,000	----------	----------	----------	----------	----------
Spain	26,548	30,325	29,096	28,642	29,369	24,141	25,555	27,692
Switzerland	----------	106	138	150	252	358	287	280
Total	607,916	622,370	589,453	----------	----------	----------	----------	----------
ASIA								
British India	87,240	83,360	83,280	100,080	93,760	96,600	70,808	----------
Japan	3,637	3,753	4,022	4,102	3,791	3,757	----------	----------
Philippine Islands	7,446	13,336	14,753	14,083	13,441	11,271	13,095	----------
Total	98,323	100,449	102,055	118,265	110,992	111,628	----------	----------
AFRICA								
Algeria	461	350	350	----------	302	----------	236	253
Tunis	----------	----------	----------	----------	----------	----------	257	197
Egypt	64,220	73,191	73,956	65,485	65,198	66,756	----------	----------
Morocco	----------	----------	----------	----------	3,143	3,364	----------	2,858
Union of South Africa	26,498	----------	36,607	26,304	36,516	45,143	41,291	42,966
Total	91,179	----------	----------	----------	----------	----------	----------	----------
AUSTRALASIA								
Australia:								
Queensland	3,280	3,915	4,261	2,003	3,019	4,188	4,106	----------
New South Wales	6,091	4,453	3,175	3,773	4,333	3,500	2,091	----------
Victoria	887	801	1,018	1,000	1,172	1,153	712	----------
Western Australia	1	2	(3)	(3)	1	1	1	----------
South Australia	5	2	1	16	1	1	2	----------
Total	10,264	9,173	8,455	6,792	8,526	8,843	6,912	----------
New Zealand	493	312	284	340	274	368	415	----------
Total	10,757	9,485	8,739	7,132	8,800	9,211	7,327	----------
Grand total	3,881,263	----------	----------	----------	----------	----------	----------	----------

[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Less than 500 bushels.

TABLE 4.—World production so far as reported, 1895-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	2,834,750,000	1901	2,366,883,000	1907	3,420,321,000	1913	3,587,429,000
1896	2,964,435,000	1902	3,187,311,000	1908	3,606,931,000	1914	3,777,913,000
1897	2,587,206,000	1903	3,066,506,000	1909	3,563,226,000	1915	4,201,589,000
1898	2,682,619,000	1904	3,109,252,000	1910	4,021,630,000	1916	3,642,103,000
1899	2,724,100,000	1905	3,461,181,000	1911	3,481,007,000		
1900	2,792,561,000	1906	3,963,645,000	1912	4,371,888,000		

WHEAT.

TABLE 5.—Acreage, production, and total farm value, by States, 1919 and 1920.

State	Thousands of acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1920	1919	1920	1919	1920	1919
Maine	7	8	159	150	366	330
Vermont	11	11	209	176	418	400
New York	500	524	10,998	11,178	19,247	24,032
New Jersey	95	109	1,520	1,962	3,116	4,316
Pennsylvania	1,524	1,664	25,284	29,055	42,983	62,758
Delaware	120	130	2,040	1,560	3,488	3,323
Maryland	670	785	11,390	10,598	18,794	22,786
Virginia	914	1,060	11,425	12,508	20,565	28,018
West Virginia	340	400	4,250	5,400	8,075	11,880
North Carolina	724	768	8,471	6,067	17,789	14,136
South Carolina	160	185	1,760	1,942	4,488	5,010
Georgia	211	240	2,110	2,520	5,064	6,628
Ohio	2,259	2,848	28,698	53,932	47,352	114,336
Indiana	1,960	2,835	23,540	42,332	39,312	88,897
Illinois	2,650	4,075	40,670	64,562	65,479	135,580
Michigan	938	1,035	14,275	20,237	23,982	42,497
Wisconsin	341	552	5,152	7,392	7,934	15,893
Minnesota	3,001	3,865	29,116	36,315	37,851	90,788
Iowa	831	1,580	13,011	22,515	18,074	45,030
Missouri	2,617	4,445	32,721	59,833	52,354	125,051
North Dakota	7,600	8,000	68,400	55,200	88,920	133,032
South Dakota	2,886	3,725	26,282	30,175	30,224	72,420
Nebraska	3,593	4,384	60,480	60,675	79,229	122,564
Kansas	8,903	11,030	137,056	152,079	178,173	326,970
Kentucky	550	900	5,610	10,350	10,715	21,838
Tennessee	424	700	4,028	6,650	7,855	14,763
Alabama	68	138	653	1,242	1,502	3,043
Mississippi	10	36	100	504	213	1,260
Texas	1,225	2,045	15,925	33,742	27,391	67,484
Oklahoma	2,890	3,860	46,240	54,040	62,424	110,782
Arkansas	126	280	1,197	2,660	2,274	5,373
Montana	1,750	2,250	19,850	10,650	25,408	25,028
Wyoming	254	250	5,080	3,540	6,858	7,505
Colorado	1,240	1,388	22,821	16,615	30,808	33,562
New Mexico	330	251	6,375	5,344	8,925	10,688
Arizona	36	38	864	950	2,264	2,138
Utah	280	294	5,366	3,542	8,210	7,438
Nevada	18	24	420	550	756	1,177
Idaho	1,050	1,050	23,600	19,075	29,500	39,104
Washington	2,329	2,441	37,982	39,305	51,276	84,113
Oregon	1,107	1,115	22,900	20,808	29,770	44,113
California	650	990	9,100	16,335	16,380	33,323
United States	57,192	72,308	787,128	934,265	1,135,806	2,009,407

TABLE 6.—Area in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
NORTH AMERICA								
United States	47,097	53,541	60,469	52,316	45,089	59,181	72,308	57,192
Canada:								
Quebec	70	55	71	64	277	366	251	222
Ontario	850	834	1,093	865	770	714	981	1,030
Manitoba	2,861	2,616	2,800	2,726	2,449	2,984	2,880	2,706

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

WHEAT—Continued.

TABLE 6.—Area in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Canada—Continued.								
Saskatchewan	4,894	5,348	8,929	9,032	8,273	9,249	10,587	10,061
Alberta	1,201	1,371	2,138	2,605	2,897	3,892	4,283	4,074
Other	69	70	78	78	90	149	144	139
Total	9,945	10,294	15,109	15,370	14,756	17,354	19,126	18,232
Mexico	2,628	---------	---------	---------	---------	---------	---------	---------
Total North America	59,670	---------	---------	---------	---------	---------	---------	---------
SOUTH AMERICA								
Argentina	15,799	16,243	15,471	16,420	16,089	17,875	16,976	14,957
Chile	1,021	1,018	1,074	1,143	1,272	1,302	1,313	---------
Uruguay	734	911	783	950	780	976	840	721
Total	17,554	18,172	17,328	18,513	18,141	20,153	19,129	---------
EUROPE								
Austria	[2] 3,011	[3] 1,660	[3] 1,588	[4] 2,008	411	400	371	---------
Hungary proper [2]	8,284	8,016	8,288	---------	---------	---------	---------	2,081
Belgium	395	400	---------	---------	---------	---------	329	282
Bulgaria [2]	2,764	2,638	2,408	2,220	2,481	2,445	[5] 2,080	[5] 2,154
Czecho-Slovakia	---------	---------	---------	---------	---------	---------	[6] 816	1,494
Denmark	123	134	164	152	131	140	124	165
Finland	---------	---------	---------	---------	---------	---------	19	19
France [2]	16,308	14,975	13,564	12,429	10,357	10,993	[7] 11,515	[7] 11,995
Alsace-Lorraine	341	333	299	---------	---------	---------	257	---------
Germany [2]	4,768	4,932	4,950	[7] 3,950	[7] 3,573	[7] 3,547	[7] 3,162	[7] 3,427
Greece	[8] 868	844	847	[9] 895	[10] 1,045	---------	936	---------
Italy	11,746	11,783	12,502	11,679	10,556	10,788	10,571	11,292
Jugo-Slavia	---------	---------	---------	---------	---------	---------	3,380	3,952
Luxemburg	27	27	22	20	22	23	---------	---------
Netherlands	138	148	163	136	122	148	168	156
Norway	12	14	14	14	20	41	41	41
Portugal	1,180	---------	929	929	685	806	133	---------
Roumania [2]	4,576	5,218	4,705	4,844	---------	[11] 5,684	[12] 4,271	[13] 5,156
Russia proper [2]	50,388	83,862	77,238	42,028	---------	---------	---------	---------
Poland [2]	1,260	[14] 343	---------	---------	---------	---------	[15] 1,407	[16] 2,044
Serbia [2]	874	---------	---------	---------	---------	---------	---------	---------
Spain	9,547	9,681	10,037	10,148	10,340	10,228	10,378	10,050
Sweden	255	269	299	307	329	381	345	360
Switzerland	156	113	114	124	139	203	130	119
United Kingdom:								
England	1,748	1,770	2,122	1,862	1,855	2,461	2,150	1,825
Wales	44	37	49	50	64	96	71	51
Scotland	52	61	77	63	61	79	80	55
Ireland	43	37	87	76	124	157	70	50
Total	1,887	1,905	2,335	2,051	2,104	2,793	2,371	1,981
Total Europe	118,908	---------	---------	---------	---------	---------	---------	---------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Galicia and Bukowina not included.

[4] Includes Galicia, but excludes Bukowina, Goritz, and Gradisca.

[5] New boundaries.

[6] Bohemia and Moravia only.

[7] Excludes Alsace-Lorraine.

[8] 1914.

[9] Excludes Macedonia.

[10] Excludes eastern Macedonia.

[11] Excludes Dobrudja.

[12] Former Kingdom, Bessarabia, and Bukowina.

[13] Former Kingdom, Bessarabia, Bukowina, and Transylvania.

[14] Winter wheat, 5 governments only.

[15] Includes Congress Poland, Western Galicia, Eastern Galicia, and Posen.

[16] Unofficial.

WHEAT—Continued.

TABLE 6.—Area in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
ASIA								
British India [2]	29,114	28,475	32,475	30,320	32,940	35,487	23,797	29,975
Cyprus	----------	----------	----------	----------	----------	----------	----------	----------
Japanese Empire:								
Japan	1,179	1,174	1,227	1,304	1,393	1,390	1,355	1,335
Formosa	14	16	16	14	13	----------	----------	----------
Chosen (Korea)	369	474	499	520	560	----------	----------	----------
Persia	----------	----------	----------	----------	----------	----------	----------	----------
Russia:								
Central Asia [3] (4 governments)	3,767	5,501	5,421	----------	----------	----------	----------	----------
Siberia [3] (4 governments)	5,987	7,931	7,727	----------	----------	----------	----------	----------
Transcaucasia [3] (1 government)	10	11	10	----------	----------	----------	----------	----------
Total Russia	9,764	13,443	13,158	----------	----------	----------	----------	----------
Turkey (Asiatic)	----------	----------	----------	----------	----------	----------	----------	----------
Total Asia	40,440	----------	----------	----------	----------	----------	----------	----------
AFRICA								
Algeria	3,371	3,368	3,209	3,272	3,222	3,186	2,800	2,647
Egypt	1,311	1,301	1,592	1,447	1,116	1,286	1,323	1,190
Tunis	1,193	1,010	1,112	1,482	1,310	1,413	1,400	1,211
Union of South Africa	----------	725	725	785	755	925	953	801
Total	5,875	6,404	6,638	6,986	6,403	6,810	6,476	5,849
AUSTRALASIA								
Australia:								
Queensland	95	132	127	94	228	128	22	37
New South Wales	2,025	3,205	2,758	4,189	3,807	3,329	2,410	1,451
Victoria	2,105	2,566	2,864	3,680	3,126	2,690	2,214	1,915
South Australia	1,993	2,268	2,502	2,739	2,778	2,356	2,186	1,927
Western Australia	544	1,097	1,376	1,734	1,567	1,250	1,145	1,073
Tasmania	36	18	24	49	28	22	12	10
Other	----------	----------	----------	----------	1	----------	1	----------
Total	6,798	9,286	9,651	12,485	11,535	9,775	7,990	6,413
New Zealand	258	167	230	329	218	281	208	193
Total Australasia	7,056	9,453	9,881	12,814	11,753	10,056	8,198	6,606
Grand total	249,503	----------	----------	----------	----------	----------	----------	----------

[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Includes some native states.

[3] Old boundaries.

TABLE 7.—Production in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
NORTH AMERICA								
United States	686,691	891,017	1,025,801	636,318	636,655	921,438	934,265	787,128
Canada:								
Quebec	1,168	990	1,411	960	3.884	6,308	4,206	3,775
Ontario	18,633	17,658	30,252	17,931	16,318	15.241	20,698	22,973
Manitoba	53,174	38,605	69,337	29,667	41,040	48,191	40,975	37,542

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[1] Five-year average, except in in a few cases where five-year statistics were unavailable.

WHEAT—Continued.

TABLE 7.—Production in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Canada—Continued.								
Saskatchewan	97,954	73,494	224,312	147,559	117,921	92,493	89,994	113,135
Alberta	24,783	28,859	66,538	65,088	52,992	23,752	34,575	83,461
Other	1,407	1,674	1,692	1,576	1,588	3,090	2,812	2,303
Total	197,119	161,280	393,543	262,781	233,743	189,075	193,260	263,189
Mexico	9,995	4,389	4,000			[5] 10,470	[5] 14,239	[5] 14,951
Total	893,805	1,056,686	1,423,343			1,120,983	1,141,764	1,065,268
SOUTH AMERICA								
Argentina	157,347	113,904	169,166	172,620	80,115	184,000	171,591	214,140
Chile	20,316	16,403	19,000	20,184	22,498	23,120	21,591	21,845
Uruguay	7,314	5,887	3,596	9,867	5,390	13,060	6,890	5,416
Total	184,977	136,194	191,762	202,671	108,003	220,180	200,072	241,401
EUROPE								
Austria	[2] 61,075	[3] 38,624	[3] 28,286	[4] 27,811	5,993	5,159	5,114	
Hungary proper [2]	156,523	105,237	152,934		[5] 115,530			[6] 29,139
Belgium	14,583	13,973	8,000		[5] 8,252	[5] 6,189	9,895	7,948
Bulgaria [2]	43,726	23,208	36,940	27,764	33,294	25,341	[6] 34,028	[6] 41,189
Czecho-Slovakia							[7] 14,942	24,453
Denmark	4,916	5,785	7,978	6,044	4,296	6,331	5,923	6,944
Finland	129	196	260	246			306	272
France [2]	317,254	282,689	222,776	204,908	134,575	225,736	[8] 182,444	[8] 230,404
Alsace-Lorraine	8,069	6,700	5,508			2,952	4,589	
Germany [2]	152,119	145,944	141,676	[8] 110,207	[8] 81,791	[8] 85,865	[8] 79,701	[8] 78,924
Greece	[9] 7,200	7,000	6,000	[10] 8,106	[11] 11,505		9,693	13,287
Italy	183,260	169,581	170,541	176,530	139,999	183,294	169,769	141,337
Jugo Slavia							50,956	64,712
Luxemburg	615	530	387	377	388	512		
Netherlands	4,976	5,779	7,090	4,035	3,452	5,431	6,015	6,677
Norway	307	269	285	317	432	1,087	1,071	1,035
Portugal	8,683	10,000	6,571	7,343	5,560	8,252		
Roumania [2]	86,679	49,270	89,241	78,520		[12] 18,447	[13] 66,060	[14] 41,815
Russia proper [2]	522,794	833,639	826,784					
Poland	[2] 23,343						[15] 20,760	[5] 25,610
Serbia [2]	14,775	9,000	10,000			[5] 4,126		
Spain	130,446	116,083	139,298	152,329	142,674	135,709	129,250	138,606
Sweden	7,907	8,472	9,170	8,979	6,864	9,003	9,509	11,123
Switzerland	3,314	3,277	3,957	4,053	4,556	7,905	3,524	3,586
United Kingdom:								
England	56,411	59,217	68,437	54,941	57,397	83,957	61,824	52,184
Wales	1,117	1,082	1,421	1,466	1,726	2,938	1,984	1,232
Scotland	2,345	2,642	3,053	2,336	2,510	3,317	3,064	2,080
Ireland	1,608	1,415	3,339	2,916	4,717	5,867	2,452	1,402
Total	61,481	64,356	76,250	61,659	66,350	96,079	69,324	56,898
Total Europe	1,806,104							
ASIA								
British India [16]	350,736	312,032	376,731	323,008	282,069	370,421	280,485	376,884
Cyprus	2,286	2,500	1,924				[5] 1,861	[5] 3,000

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Excludes Galicia and Bukowina.

[4] Includes Galicia and excludes Bukowina, Goritz, and Gradisca.

[5] Unofficial.

[6] New boundaries.

[7] Bohemia and Moravia only.

[8] Excludes Alsace-Lorraine.

[9] 1914.

[10] Excludes Macedonia.

[11] Excludes Eastern Macedonia.

[12] Excludes Dobrudja.

[13] Former Kingdom, Bessarabia, and Bukowina.

[14] Former Kingdom and Bessarabia.

[15] Includes Congress Poland, Eastern and Western Galicia and Posen.

[16] Includes some native states.

WHEAT—Continued.

TABLE 7.—Production in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
ASIA—Continued	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Japanese Empire:								
Japan	25,274	22,975	26,778	30,047	34,739	32,923	29,800	28,050
Formosa	173	195	161	138	125	--------	--------	--------
Chosen (Korea)	4,871	5,848	6,146	6,387	6,540	6,655	7,144	--------
Persia	16,000	14,000	16,000	--------	--------	--------	--------	--------
Russia:								
Central Asia [2] (4 governments)	29,292	68,448	44,132	--------	--------	--------	--------	--------
Siberia [2] (4 governments)	54,737	104,038	50,308	--------	--------	--------	--------	--------
Transcaucasia [2] (1 government)	110	82	126	--------	--------	--------	--------	--------
Total Russia	84,139	172,568	94,566	--------	--------	--------	--------	--------
Turkey (Asiatic)	35,000	--------	--------	--------	--------	--------	--------	--------
Total Asia	518,479	--------	--------	--------	--------	--------	--------	--------
AFRICA								
Algeria	33,071	30,000	34,654	29,151	23,151	49,774	25,559	13,902
Egypt	34,000	32,831	39,144	36,543	29,834	32,555	30,137	27,246
Tunis	6,063	2,205	11,023	7,165	6,963	8,451	7,349	4,766
Union of South Africa	4,620	6,034	7,076	4,857	4,790	8,833	8,983	6,630
Total	77,754	71,070	91,897	77,716	64,738	99,613	72,028	52,544
AUSTRALASIA								
Australia:								
Queensland	1,250	1,825	1,635	427	2,463	1,035	104	287
New South Wales	26,717	39,219	13,235	68,869	36,598	37,705	18,325	4,297
Victoria	27,656	33,974	4,065	60,366	51,162	37,738	25,240	14,858
South Australia	22,843	17,470	3,639	35,210	45,745	28,693	22,937	14,947
Western Australia	5,671	13,751	2,707	18,811	16,103	9,304	8,845	12,270
Tasmania	806	361	396	1,025	348	252	187	141
Other	--------	--------	--------	1	14	7	--------	1
Total	84,943	106,600	25,677	184,709	152,433	114,734	75,638	46,801
New Zealand	7,885	5,559	6,854	7,332	5,083	6,888	6,568	4,100
Total Australasia	92,828	112,159	32,531	192,041	157,516	121,622	82,206	50,901
Grand total	3,573,947	--------	--------	--------	--------	--------	--------	--------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

TABLE 8.—World production so far as reported, 1891-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1891	2,432,322,000	1898	2,948,305,000	1905	3,327,084,000	1912	3,791,951,000
1892	2,481,805,000	1899	2,783,885,000	1906	3,434,354,000	1913	4,127,437,000
1893	2,559,174,000	1900	2,610,751,000	1907	3,133,965,000	1914	3,585,916,000
1894	2,660,557,000	1901	2,955,975,000	1908	3,182,105,000	1915	4,127,685,000
1895	2,593,312,000	1902	3,090,116,000	1909	3,581,519,000	1916	3,701,333,000
1896	2,506,320,000	1903	3,189,813,000	1910	3,575,055,000		
1897	2,236,268,000	1904	3,163,542,000	1911	3,551,795,000		

OATS.

TABLE 9.—Acreage, production, and total farm value, by States, 1919 and 1920.

State	Thousands of acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1920	1919	1920	1919	1920	1919
Maine	119	115	4,974	3,910	4,228	3,597
New Hampshire	14	15	546	510	410	434
Vermont	81	85	2,835	2,550	2,126	2,295
Massachusetts	14	16	518	608	414	547
Rhode Island	1	1	28	30	22	28
Connecticut	24	25	744	775	558	682
New York	1,150	1,120	44,275	28,560	29,664	23,705
New Jersey	85	88	2,720	2,640	2,040	2,112
Pennsylvania	1,175	1,189	45,825	36,859	30,244	29,487
Delaware	6	6	198	138	139	124
Maryland	65	65	2,112	1,820	1,478	1,492
Virginia	220	240	4,818	5,280	3,903	5,280
West Virginia	200	190	5,400	4,750	4,266	4,322
North Carolina	180	198	3,960	3,307	3,802	3,565
South Carolina	434	510	10,416	11,730	10,728	12,903
Georgia	550	500	11,550	10,000	12,474	11,500
Florida	60	54	1,020	1,026	612	1,231
Ohio	1,614	1,523	71,339	51,020	35,670	36,734
Indiana	1,875	1,750	76,875	56,000	35,362	38,640
Illinois	4,100	4,180	161,950	125,400	69,638	87,780
Michigan	1,425	1,425	56,430	35,625	27,086	25,294
Wisconsin	2,408	2,348	107,878	78,423	52,860	54,896
Minnesota	3,373	3,275	126,488	91,700	45,536	58,688
Iowa	5,894	5,670	229,866	196,182	82,752	125,556
Missouri	1,775	1,675	54,138	45,225	26,528	32,110
North Dakota	2,485	2,280	59,640	35,340	20,874	23,678
South Dakota	2,219	1,850	75,446	53,650	24,897	33,800
Nebraska	2,400	2,133	83,040	69,962	30,725	45,475
Kansas	2,241	1,574	68,799	44,229	26,832	32,287
Kentucky	350	350	8,225	7,875	6,004	7,166
Tennessee	350	300	8,225	6,600	6,416	6,138
Alabama	366	372	6,551	6,696	5,765	7,031
Mississippi	236	278	4,012	4,448	3,490	4,670
Louisiana	60	75	1,380	1,650	1,132	1,650
Texas	1,575	2,250	44,100	94,500	29,106	60,480
Oklahoma	1,500	1,425	48,000	47,025	21,120	32,918
Arkansas	352	320	8,800	7,040	6,864	6,195
Montana	600	650	16,800	6,110	8,568	5,560
Wyoming	300	285	11,400	5,130	7,068	5,746
Colorado	255	249	8,058	6,524	4,835	5,872
New Mexico	67	61	2,278	2,196	1,822	2,086
Arizona	13	13	481	494	462	494
Utah	78	72	3,143	2,448	2,514	2,399
Nevada	6	8	252	256	302	256
Idaho	200	210	8,000	7,350	5,440	7,203
Washington	323	324	15,052	12,960	10,837	12,053
Oregon	330	318	12,045	9,953	7,829	9,157
California	175	175	5,425	5,250	4,340	5,040
United States	43,323	41,835	1,526,055	1,231,754	719,782	880,296

OATS—Continued.

TABLE 10.—World production so far as reported, 1895-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	3,008,154,000	1901	2,862,615,000	1907	3,603,896,000	1913	4,697,437,000
1896	2,847,115,000	1902	3,626,303,000	1908	3,591,012,000	1914	4,034,857,000
1897	2,633,971,000	1903	3,378,034,000	1909	4,312,882,000	1915	4,362,713,000
1898	2,903,974,000	1904	3,611,302,000	1910	4,182,410,000	1916	4,138,050,000
1899	3,256,256,000	1905	3,510,167,000	1911	3,808,561,000		
1900	3,166,002,000	1906	3,544,961,000	1912	4,617,394,000		

TABLE 11.—Area in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
NORTH AMERICA								
United States	37,357	38,442	40,996	41,527	43,553	44,349	41,835	43,323
Canada:								
New Brunswick	204	200	201	198	190	224	305	309
Quebec	1,451	1,327	1,400	1,073	1,493	1,933	2,141	2,206
Ontario	2,964	2,840	3,095	1,991	2,687	2,924	2,674	2,880
Manitoba	1,379	1,331	1,317	1,444	1,500	1,715	1,847	1,874
Saskatchewan	2,293	2,520	3,336	3,792	4,522	4,988	4,838	5,107
Alberta	1,223	1,502	1,827	2,124	2,538	2,652	2,767	3,090
Other	326	341	380	374	383	354	380	384
Total Canada	9,840	10,061	11,556	10,996	13,313	14,790	14,952	15,850
Mexico	---	---	---	---	---	---	---	---
Total	47,197	48,503	52,552	52,523	56,866	59,139	56,787	59,173
SOUTH AMERICA								
Argentina	1,999	3,087	2,869	2,565	2,525	3,200	3,080	2,301
Chile	68	122	152	161	126	79	79	---
Uruguay	46	97	82	105	142	165	85	85
Total	2,113	3,306	3,103	2,831	2,793	3,444	3,244	---
EUROPE								
Austria	[2] 4,613	[3] 2,835	[3] 2,663	[4] 3,630	700	651	606	---
Hungary proper [2]	2,669	2,603	2,664	---	---	---	---	[5] 836
Croatia Slavonia [2]	246	---	---	---	---	---	---	---
Bosnia Herzegovina [2]	225	---	---	---	---	---	---	---
Belgium	644	686	---	---	---	---	550	537
Bulgaria [2]	455	379	395	326	343	345	[5] 302	[5] 319
Czecho-Slovakia	---	---	---	---	---	---	[6] 1,302	1,947
Denmark	1,028	---	1,024	1,042	981	937	961	1,001
Finland	[7] 987	---	---	---	---	---	1,013	1,013
France	[2] 9,801	[2] 8,873	8,062	7,777	7,308	6,721	[8] 7,055	[8] 8,065
Alscace Lorraine	284	278	275	---	---	---	---	---
Germany [2]	10,750	10,843	11,404	[8] 8,759	[8] 8,625	[8] 8,071	[8] 7,240	[8] 8,006
Greece	---	89	100	[9] 145	[10] 165	---	155	---
Italy	1,253	1,213	1,208	1,103	1,107	1,211	1,129	1,159
Jugo-Slavia	---	---	---	---	---	---	---	1,036
Luxemburg	77	77	72	69	56	48	---	---
Netherlands	346	346	358	343	371	392	368	392
Norway	266	270	306	307	356	343	343	343

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Galicia and Bukowina not included.

[4] Includes Galicia, excludes Bukowina.

[5] New boundaries.

[6] Bohemia and Moravia.

[7] Census of 1910.

[8] Excludes Alsace-Lorraine.

[9] Excludes Macedonia.

[10] Excludes Eastern Macedonia.

OATS—Continued.

TABLE 11.—Area in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
EUROPE—Continued								
Roumania [2]	1,105	1,056	1,065	1,068		[3] 1,084	[4] 952	[5] 2,053
Russia proper [2]	38,013	39,195	33,945	34,706				
Poland [2]	2,858		985				[6] 2,886	[6] 3,791
Northern Caucasia [2]	1,190	1,099						
Serbia [2]	266							
Spain	1,276	1,304	1,403	1,398	1,425	1,507	1,595	1,574
Sweden	1,969	1,960	1,970	1,954	1,933	1,811	1,760	1,758
Switzerland	81	83	92	63	71	86	57	56
United Kingdom:								
England	1,835	1,730	1,888	1,862	2,013	2,415	2,252	2,015
Wales	204	200	199	222	246	366	312	249
Scotland	952	920	983	991	1,041	1,244	1,111	1,032
Ireland	1,049	1,029	1,089	1,072	1,464	1,580	1,442	1,331
Total	4,040	3,879	4,159	4,147	4,764	5,605	5,117	4,627
Total Europe	84,158							
ASIA								
Cyprus								
Russia:								
Central Asia [2] (4 governments)	938	1,127	986					
Siberia [2] (4 governments)	3,972	5,148	5,161					
Transcaucasia [2] (1 government)	2	2	2					
Total Russia	4,912	6,277	6,149					
AFRICA								
Algeria	456	573	590	536	682	588	533	576
Tunis	141	99	148	164	124	151	127	124
Union of South Africa					250	257	558	564
Total					1,056	996	1,218	1,264
AUSTRALASIA								
Australia:								
Queensland	2	4	3	(7)	7	2	(7)	
New South Wales	75	103	43	58	67	83	86	
Victoria	388	442	435	354	442	293	343	
South Australia	101	117	141	127	152	107	161	
Western Australia	81	134	96	104	122	96	142	
Tasmania	61	59	57	78	55	35	36	
Total	708	859	775	721	845	616	768	
New Zealand	376	362	288	213	177	156	173	410
Total Australasia	1,084	1,221	1,063	934	1,022	772	941	
Grand total	140,061							

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Includes Bessarabia, but excludes Dubrudja

[4] Former Kingdom, Bessarabia, and Bukowina.

[5] Former Kingdom, Bessarabia, Bukowina, and Transylvania.

[6] Unofficial.

[7] Less than 500 acres.

OATS—Continued.

TABLE 12.—Production in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
NORTH AMERICA								
United States	1,131,175	1,141,060	1,549,030	1,251,837	1,592,740	1,538,124	1,231,754	1,526,055
Canada:								
New Brunswick	5,933	6,488	5,560	6,039	4,275	7,051	9,261	9,118
Quebec	40,294	42,119	42,182	24,411	32,466	52,667	57,275	66,729
Ontario	105,036	99,400	122,810	50,771	98,078	131,753	78,388	129,171
Manitoba	54,192	31,951	50,750	48,439	45,375	54,474	57,698	57,657
Saskatchewan	98,481	61,816	145,066	163,278	123,214	107,253	112,157	141,549
Alberta	52,045	57,076	83,876	102,199	86,289	60,323	65,725	115,091
Other	11,697	14,228	14,710	15,074	13,315	12,791	13,883	11,395
Total Canada	367,678	313,078	464,954	410,211	403,012	426,312	394,387	530,710
Mexico	17	17	17	17	-----	-----	-----	-----
Total	1,498,870	1,454,155	2,014,001	1,662,065	-----	-----	-----	-----
SOUTH AMERICA								
Argentina	52,122	50,981	49,397	75,280	32,009	68,635	33,762	57,113
Chile	2,934	4,437	7,104	6,350	5,564	3,177	3,250	[7] 2,479
Uruguay	830	1,850	933	2,283	1,926	3,697	1,288	1,728
Total	55,886	57,268	57,434	83,913	39,499	75,509	38,300	61,320
EUROPE								
Austria	[2] 143,392	[3] 132,114	[3] 57,625	[4] 95,593	10,901	12,933	13,581	-----
Hungary proper [2]	85,840	86,537	80,925	-----	-----	-----	-----	[5] 23,120
Croatia Slavonia [2]	5,216	4,000	5,000	-----			-----	-----
Bosnia Herzegovina [2]	4,973	3,000	4,000	-----	-----	-----	-----	-----
Belgium	40,905	49,742	40,000	-----	-----	-----	26,920	27,876
Bulgaria [2]	9,880	8,080	9,545	7,372	6,558	3,613	[5] 7,387	[5] 9,731
Czecho-Slovakia	-----	-----	-----	-----	-----	-----	[6] 43,951	55,859
Denmark	43,115	38,653	42,859	51,656	37,653	41,571	47,585	47,275
Finland	21,989	19,572	22,905	22,067	-----	[7] 22,649	24,133	24,562
France [2]	310,020	274,458	238,551	277,179	214,259	176,504	[8] 168,303	[8] 290,925
Alsace-Lorraine	13,184	13,172	6,607	-----	-----	4,049	8,030	-----
Germany [2]	591,996	622,674	412,400	-----	[8] 249,964	[8] 322,475	[8] 309,587	[7,8] 237,600
Greece	-----	2,296	2,182	[9] 2,742	[10] 2,038	-----	2,749	3,996
Italy	36,945	26,827	31,443	26,076	33,889	45,353	34,695	24,223
Jugo-Slavia	-----	-----	-----	-----	-----	-----	-----	28,598
Luxemburg	3,382	3,784	1,881	2,720	2,015	1,459	-----	-----
Netherlands	18,512	19,957	20,692	22,240	18,594	18,617	20,512	24,285
Norway	10,245	9,325	10,318	13,502	17,004	16,582	15,106	15,153
Roumania [2]	27,545	25,015	29,054	28,935	-----	[11] 5,890	[12] 22,824	[13] 37,206
Russia proper [2]	874,945	692,197	757,308	843,249	-----	-----	-----	-----
Poland	[2] 76,590	-----	-----	-----	-----	-----	[7] 91,629	[7] 128,142
Serbia [2]	29,602	30,291	25,267	-----	-----	-----	-----	-----
Spain	5,443	5,000	4,000	-----	-----	-----	-----	-----
Northern Caucasia [2]	29,110	31,227	36,949	32,163	33,048	30,474	32,915	37,772
Sweden	79,115	52,557	91,311	93,089	61,400	57,880	76,591	66,207
Switzerland	4,784	5,181	5,601	4,127	4,209	5,188	2,811	3,114

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[1] Five-year average except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Excludes Galicia and Bukowina.

[4] Includes Galicia, excludes Bukowina, Goritz and Gradisca.

[5] New boundaries.

[6] Bohemia and Moravia.

[7] Unofficial.

[8] Excludes Alsace-Lorraine.

[9] Excludes Macedonia.

[10] Excludes Eastern Macedonia.

[11] Includes Bessarabia, excludes Dobrudja.

[12] Former Kingdom, Bessarabia and Bukowina.

[13] Former Kingdom and Bessarabia.

OATS—Continued.

TABLE 12.—Production in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
EUROPE—Continued	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
United Kingdom:								
England	74,750	71,408	78,409	77,676	80,981	104,480	82,950	78,768
Wales	7,274	7,431	7,305	8,237	8,678	13,847	11,264	7,312
Scotland	37,670	38,115	40,313	37,362	44,949	53,284	42,440	41,256
Ireland	63,083	63,287	58,065	52,774	80,119	85,822	85,540	65,388
Total United Kingdom	182,777	180,241	184,092	176,049	214,727	257,433	222,194	192,724
Total Europe	2,636,321	----------	----------	----------	----------	----------	----------	----------
ASIA								
Cyprus	429	400	405	----------	----------	----------	[3] 187	----------
Russia:								
Central Asia [2] (4 governments)	15,044	27,887	16,422	----------	----------	----------	----------	----------
Siberia [2] (4 governments)	72,305	133,275	68,381	----------	----------	----------	----------	----------
Transcaucasia [2] (1 government)	54	31	36	----------	----------	----------	----------	----------
Total Russia	87,403	161,193	84,839	----------	----------	----------	----------	----------
AFRICA								
Algeria	12,950	10,000	15,082	13,140	16,125	22,914	13,557	5,890
Tunis	4,333	689	3,445	2,067	3,996	3,817	3,445	1,516
Union of South Africa	7,197	----------	9,661	----------	6,927	10,775	9,520	7,519
Total	24,480	----------	28,188	----------	27,048	37,506	26,522	14,925
AUSTRALASIA								
Australia:								
Queensland	47	58	44	2	109	45	4	----------
New South Wales	1,571	1,893	512	1,344	1,083	1,455	1,273	----------
Victoria	8,592	9,170	1,608	9,329	8,289	6,141	5,275	----------
South Australia	1,371	1,239	368	2,134	1,840	1,249	1,541	----------
Western Australia	1,204	1,708	465	1,538	1,689	909	1,500	----------
Tasmania	2,066	1,644	1,342	2,189	1,006	589	848	----------
Total	14,851	15,712	4,339	16,536	14,016	10,388	10,441	----------
New Zealand	13,664	15,206	11,436	7,653	5,371	4,943	6,885	----------
Total Australasia	28,515	30,918	15,775	24,189	19,387	15,331	17,326	----------
Grand total	4,331,904	----------	----------	----------	----------	----------	----------	----------

[1] Five-year average except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Unofficial.

BARLEY.

TABLE 13.—Acreage, production, and total farm value, by States, 1920.

[000 omitted.]

State	Acreage	Production	Farm value Dec. 1	State	Acreage	Production	Farm value Dec. 1
	Acres	Bushels	Dollars		Acres	Bushels	Dollars
Maine	4	104	144	Kansas	838	21,285	9,578
New Hampshire	1	27	39	Kentucky	4	112	129
Vermont	12	336	403	Tennessee	9	225	248
New York	120	3,480	3,445	Texas	11	253	190
Pennsylvania	20	480	432	Oklahoma	130	3,120	2,246
Maryland	6	165	182	Montana	77	1,540	1,001
Virginia	15	405	405	Wyoming	28	1,008	1,109
Ohio	102	2,825	2,316	Colorado	190	4,674	3,506
Indiana	75	2,025	1,762	New Mexico	21	630	472
Illinois	200	6,080	4,986	Arizona	20	680	952
Michigan	240	6,240	5,429	Utah	17	685	685
Wisconsin	502	15,913	13,367	Nevada	8	304	502
Minnesota	1,000	25,000	15,500	Idaho	112	4,256	3,192
Iowa	284	7,810	4,920	Washington	110	3,883	3,883
				Oregon	80	2,576	2,576
Missouri	8	224	220	California	1,250	28,750	28,750
North Dakota	1,260	22,680	12,701				
South Dakota	1,073	26,825	13,949	United States	8,083	202,024	142,931
Nebraska	256	7,424	3,712				

TABLE 14.—Area in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
NORTH AMERICA								
United States	7,619	7,565	7,148	7,757	8,933	9,740	7,198	8,083
Canada:								
New Brunswick	3	2	2	2	2	7	11	8
Quebec	99	85	85	73	165	189	235	194
Ontario	587	461	449	326	361	660	569	484
Manitoba	561	468	567	688	708	1,103	894	839
Saskatchewan	234	290	300	367	670	699	493	519
Alberta	185	178	304	337	472	470	414	481
Other	14	12	11	10	14	26	30	27
Total Canada	1,683	1,496	1,718	1,803	2,392	3,154	2,646	2,552
Mexico		292						
Total	9,302							
SOUTH AMERICA								
Argentina	268	418	397	431	268			615
Chile	117	153	147	121	117	98	98	
Uruguay	4	14	5	10	13	6		5
Total	389	585	549	562	398			

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

BARLEY—Continued.

TABLE 14.—Area in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
EUROPE								
Austria	[2] 2,712	[3] 1,729	[3] 1,578	--------	268	255	233	--------
Hungary proper [2]	2,760	2,705	2,830	--------	--------	--------	--------	[4] 1,201
Croatia Slavonia [2]	158	--------	--------	--------	--------	--------	--------	--------
Bosnia Herzegovina [2]	214	--------	--------	--------	--------	--------	--------	--------
Belgium	85	84	--------	--------	--------	--------	75	87
Bulgaria [2]	616	587	590	560	593	604	[4] 474	[4] 502
Czecho-Slovakia	--------	--------	--------	--------	--------	--------	[5] 857	1,695
Denmark	591	--------	644	633	592	548	569	585
Finland	--------	--------	--------	--------	--------	--------	293	293
France [2]	1,866	1,780	1,575	1,538	1,699	1,371	[6] 1,194	[6] 1,497
Alsace-Lorraine	121	117	115	--------	--------	--------	--------	--------
Germany [2]	3,976	3,909	4,002	--------	[6] 3,738	[6] 3,640	[6] 3,081	[6] 3,273
Greece	195	186	198	[7] 297	[8] 390	--------	300	--------
Italy	613	610	608	596	469	478	480	494
Jugo-Slavia	--------	--------	--------	--------	--------	--------	--------	1,182
Luxemburg	3	4	4	5	7	7	--------	--------
Netherlands	68	67	63	60	52	60	59	56
Norway	89	--------	97	98	116	156	156	156
Roumania [2]	1,319	1,405	1,371	1,454	--------	[9] 2,120	[10] 1,942	[11] 3,308
Russia proper [2]	23,075	25,260	22,325	22,031	--------	--------	--------	--------
Poland [2]	1,249	--------	--------	--------	--------	--------	[12] 1,413	[13] 2,078
Northern Caucasia [2]	3,735	4,495	4,400	--------	--------	--------	--------	--------
Serbia [2]	242	--------	--------	--------	--------	--------	--------	--------
Spain	3,509	3,404	3,786	3,886	4,086	4,209	4,254	4,265
Sweden	451	436	431	421	438	452	412	402
United Kingdom:								
England	1,400	1,420	1,152	1,245	1,365	1,395	1,406	1,538
Wales	88	84	80	87	95	106	104	99
Scotland	191	194	149	170	159	153	174	205
Ireland	165	172	142	150	177	185	187	208
Total United Kingdom	1,844	1,870	1,523	1,652	1,796	1,839	1,871	2,050
Total Europe	49,370	--------	--------	--------	--------	--------	--------	--------
ASIA								
British India	7,836	7,098	7,821	7,924	7,883	8,323	--------	--------
Cyprus	--------	--------	--------	--------	--------	--------	--------	--------
Japanese Empire:								
Japan	3,183	3,294	3,213	3,075	2,888	2,862	2,931	2,691
Formosa	5	5	5	5	5	--------	--------	--------
Korea	843	1,107	1,182	1,233	1,322	--------	--------	--------
Total Japanese Empire	4,031	4,406	4,400	4,313	4,215	--------	--------	--------
Russia:								
Central Asia [2] (4 governments)	368	485	350	--------	--------	--------	--------	--------
Siberia [2] (4 governments)	459	630	651	--------	--------	--------	--------	--------
Transcaucasia [2] (1 government)	2	2	2	--------	--------	--------	--------	--------
Total Russia, Asiatic	829	1,117	1,003	--------	--------	--------	--------	--------
Total Asia	12,696	12,621	13,224	--------	--------	--------	--------	--------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Excludes Galicia and Bukowina.

[4] New boundaries.

[5] Bohemia and Moravia.

[6] Excludes Alsace-Lorraine.

[7] Excludes Macedonia.

[8] Excludes Eastern Macedonia.

[9] Includes Bessarabia, but excludes Dobrudja.

[10] Former Kingdom, Bessarabia, and Bukowina.

[11] Former Kingdom, Bessarabia, Bukowina, and Transylvania.

[12] Includes Congress Poland, Western Galicia, Eastern Galicia, and Posen.

[13] Unofficial.

BARLEY—Continued.

CORN—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
AFRICA								
Algeria	3,353	3,131	2,703	3,009	2,839	2,794	2,639	2,444
Egypt	394	----------	463	439	445	336	357	340
Tunis	1,145	795	1,038	1,233	1,038	1,197	977	939
Union of South Africa	----------	----------	----------	64	57	58	55	99
Total Africa	4,892	----------	----------	4,745	4,379	4,385	4,028	3,822
AUSTRALASIA								
Australia:								
Queensland	7	9	7	1	13	8	----------	----------
New South Wales	12	21	5	6	5	6	6	----------
Victoria	60	83	62	61	93	85	[2] 100	----------
South Australia	46	91	66	85	104	96	[2] 136	----------
Western Australia	6	11	7	10	11	5	[2] 8	----------
Tasmania	6	8	6	5	5	5	----------	----------
Total	137	223	153	168	231	205	----------	----------
New Zealand	39	32	18	30	30	19	19	----------
Total Australasia	176	255	171	198	261	224	----------	----------
Grand total	76,825	----------	----------	----------	----------	----------	----------	----------

[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Unofficial.

TABLE 15.—World Production, so far as reported, 1895-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	915,504,000	1901	1,072,195,000	1907	1,271,237,000	1913	1,650,265,000
1896	932,100,000	1902	1,229,132,000	1908	1,274,897,000	1914	1,463,289,000
1897	864,605,000	1903	1,235,786,000	1909	1,458,263,000	1915	1,522,732,000
1898	1,030,581,000	1904	1,175,784,000	1910	1,388,734,000	1916	1,529,031,000
1899	965,720,000	1905	1,180,053,000	1911	1,373,286,000		
1900	959,622,000	1906	1,296,579,000	1912	1,466,977,000		

TABLE 16.—Production in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
NORTH AMERICA								
United States	181,881	194,953	228,851	182,309	211,759	256,225	161,345	202,024
Canada:								
New Brunswick	79	64	48	45	40	163	285	194
Quebec	2,382	2,261	2,255	1,456	3,064	4,551	5,344	4,910
Ontario	17,017	13,987	15,369	7,498	11,191	24,248	13,134	16,660

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

TABLE 16.—Production in undermentioned countries, 1909-1920—Continued.

BARLEY—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Canada—Continued								
Manitoba	15,954	9,828	16,658	13,729	15,930	27,963	17,149	17,520
Saskatchewan	7,350	4,901	9,523	9,916	14,068	11,888	8,971	10,502
Alberta	5,364	4,806	9,822	9,774	10,386	7,756	10,562	12,739
Other	386	354	342	352	379	718	944	786
Total	48,532	36,201	54,017	42,770	55,058	77,287	56,389	63,311
Mexico	6,666	10,839	10,000	---------	---------	17,711	---------	---------
Total	237,079	241,993	292,868	---------	---------	351,223	---------	---------
SOUTH AMERICA								
Argentina	3,626	8,037	5,144	5,430	2,165	---------	---------	[2] 10,279
Chile	3,924	5,567	3,827	4,358	4,840	3,304	3,977	[2] 4,080
Uruguay	61	165	40	115	110	108	---------	73
Total	7,611	13,769	9,011	9,903	7,115	---------	---------	---------
EUROPE								
Austria	[3] 71,988	[4] 58,458	[4] 29,783	---------	3,291	4,233	3,822	---------
Hungary proper [3]	69,812	65,265	56,186	---------	---------	---------	---------	[5] 20,045
Croatia Slavonia [3]	2,540	1,940	1,938	---------	---------	---------	---------	---------
Bosnia-Herzegovina [3]	3,455	3,000	3,000	---------	---------	---------	---------	---------
Belgium	4,247	4,232	4,000	---------	---------	---------	3,617	3,693
Bulgaria [3]	12,425	9,278	11,848	10,037	11,980	7,094	[5] 10,538	[5] 14,066
Czecho-Slovakia	---------	---------	---------	---------	---------	---------	[6] 20,648	38,617
Denmark	22,589	20,780	25,890	24,477	17,881	21,465	24,600	23,548
Finland	5,737	4,316	5,021	4,885	---------	[2] 5,635	5,295	4,983
France [3]	46,489	42,719	31,787	38,268	37,265	27,475	[7] 23,626	[7] 35,399
Alsace-Lorraine	4,615	4,059	3,127	---------	---------	1,762	3,249	---------
Germany [3]	153,529	144,125	114,077	---------	[7] 89,886	[7] 103,720	[2] [7] 83,000	[7] 87,741
Greece	3,692	3,094	2,891	[8] 3,957	[9] 5,796	2,500	5,020	7,183
Italy	10,104	6,917	11,051	10,109	7,422	9,686	8,327	5,870
Jugo-Slavia	---------	---------	---------	---------	---------	---------	---------	20,654
Luxemburg	82	108	83	125	154	136	---------	---------
Netherlands	3,270	3,019	3,380	2,498	2,573	2,176	2,688	2,846
Norway	2,867	2,591	2,682	3,415	4,021	5,622	5,275	5,427
Roumania [3]	24,821	25,505	28,688	30,038	---------	[10] 4,993	[11] 31,641	[12] 48,184
Russia proper [3]	372,856	310,249	316,904	350,223	---------	---------	---------	---------
Poland	[3] 27,150	---------	---------	---------	---------	---------	[13] 27,843	[2] 40,326
Northern Caucasia [3]	67,191	73,323	---------	---------	---------	---------	---------	---------
Serbia [3]	5,072	3,000	2,250	---------	---------	---------	---------	---------
Spain	74,689	72,272	82,763	86,863	76,747	90,496	81,808	90,462
Sweden	14,592	12,195	14,254	14,621	12,263	12,947	12,892	11,121
United Kingdom:								
England	47,352	48,205	34,898	40,022	42,897	45,328	40,592	47,864
Wales	2,812	2,743	2,467	2,731	2,781	3,312	3,200	2,824
Scotland	7,103	7,616	5,183	5,340	5,816	5,416	6,112	7,784
Ireland	7,493	8,073	5,828	6,474	7,796	8,024	8,125	7,527
Total	64,760	66,637	48,376	54,567	59,290	62,080	58,029	65,999
Total Europe	1,063,957	---------	---------	---------	---------	---------	---------	---------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Unofficial.

[3] Old boundaries.

[4] Excludes Galicia and Bukowina.

[5] New boundaries.

[6] Bohemia and Moravia.

[7] Excludes Alsace-Lorraine.

[8] Excludes Macedonia.

[9] Excludes Eastern Macedonia.

[10] Includes Bessarabia, but excludes Dobrudja.

[11] Former Kingdom, Bessarabia, and Bukowina.

[12] Former Kingdom and Bessarabia.

[13] Includes Congress Poland, Western Galicia, Eastern Galicia, and Posen.

BARLEY—Continued.

TABLE 16.—Production in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
ASIA								
British India	40,973	125,113	142,847	147,653	155,447	155,307	----------	----------
Cyprus	2,151	2,000	2,000	----------	1,954	----------	[2] 2,393	[2] 3,500
Japanese Empire:								
Japan	89,528	85,775	94,959	89,366	88,896	82,650	91,500	95,808
Formosa	53	60	61	50	50	----------	----------	----------
Korea	19,436	23,708	26,527	24,577	25,988	27,751	26,480	----------
Total Japan	109,017	109,543	121,547	113,993	114,934	----------	----------	----------
Russia:								
Central Asia [3] (4 governments)	5,119	7,929	3,278	----------	----------	----------	----------	----------
Siberia [3] (4 governments)	6,027	11,498	5,753	----------	----------	----------	----------	----------
Transcaucasia [3] (1 government)	25	24	38	----------	----------	----------	----------	----------
Total Russia (Asiatic)	11,171	19,451	9,069	----------	----------	----------	----------	----------
Total Asia	163,312	256,107	275,463	----------	----------	----------	----------	----------
AFRICA								
Algeria	41,961	35,785	39,866	35,969	28,529	60,742	33,667	14,035
Egypt	----------	11,294	14,013	13,417	13,863	10,063	10,283	7,475
Tunis	7,900	3,215	11,482	4,914	8,267	10,426	5,512	3,169
Union of South Africa	2,015	----------	----------	----------	1,000	2,054	1,623	1,160
Total Africa	51,876	----------	----------	----------	51,659	83,285	51,085	25,839
AUSTRALASIA								
Australia:								
Queensland	119	120	106	8	250	143	----------	----------
New South Wales	204	313	47	115	73	98	98	----------
Victoria	1,400	1,870	601	1,735	1,800	1,971	[2] 2,029	----------
South Australia	842	1,375	447	1,698	1,734	1,651	2,498	----------
Western Australia	70	173	24	131	134	36	[2] 81	----------
Tasmania	184	193	105	116	89	98	----------	----------
Total	2,819	4,044	1,330	3,803	4,080	3,997	----------	----------
New Zealand	1,402	1,234	597	820	738	569	711	----------
Total Australasia	4,221	5,278	1,927	4,623	4,818	----------	----------	----------
Grand total	1,528,056	----------	----------	----------	----------	----------	----------	----------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Unofficial.

[3] Old boundaries.

RYE.

TABLE 17.—Acreage (sown and harvested), production, and total farm values. by States, 1920.

[000 omitted.]

State	Acreage		Production	Farm value Dec. 1
	Sown in fall of 1919	Harvested		
	Acres	Acres	Bush.	Dolls.
Vermont	1	1	20	26
Massachusetts	5	5	105	205
Connecticut	7	7	140	244
New York	112	107	1,872	2,958
New Jersey	67	66	1,155	1,964
Pennsylvania	170	166	2,656	3,718
Delaware	4	4	60	82
Maryland	31	30	462	721
Virginia	75	72	864	1,339
West Virginia	16	15	165	264
North Carolina	98	96	912	1,733
South Carolina	24	24	264	792
Georgia	31	29	290	609
Ohio	85	80	1,152	1,555
Indiana	325	310	4,340	5,642
Illinois	225	210	3,276	4,259
Michigan	690	660	9,702	12,613
Wisconsin	483	483	7,728	10,046
Minnesota	492	480	8,160	9,955
Iowa	65	63	1,071	1,253
Missouri	51	50	600	750
North Dakota	960	934	9,340	11,115
South Dakota	350	320	4,320	4,709
Nebraska	278	264	3,722	3,834
Kansas	125	124	1,612	1,612
Kentucky	44	40	480	720
Tennessee	33	30	300	570
Alabama	4	4	44	110
Texas	3	3	48	72
Oklahoma	26	25	375	375
Arkansas	4	4	40	88
Montana	90	80	880	950
Wyoming	32	30	540	621
Colorado	125	115	1,357	1,425
Utah	16	15	124	186
Idaho	19	18	252	252
Washington	42	39	370	592
Oregon	42	40	520	650
United States	5,250	5,043	69,318	88,609

TABLE 18.—Area in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	acres 1,000	acres 1,000	acres 1,000	acres 1,000	acres 1,000	acres 1,000	acres 1,000	acres 1,000
NORTH AMERICA								
United States	2,236	2,541	3,129	3,213	4,317	6,391	7,103	5,043
Canada:								
Quebec	14	9	9	8	22	29	33	28
Ontario	77	78	78	69	68	113	140	133
Manitoba	5	5	12	30	37	240	299	149
Saskatchewan	3	3	7	23	53	124	190	172
Alberta	12	16	6	18	31	48	84	161
Other	1	(2)	(2)	(2)	1	1	7	7
Total Canada	112	111	112	148	212	555	753	650
Mexico								
Total	2,348							
SOUTH AMERICA								
Argentina	68	228	229	212	180			
Chile	6	6	4	11	6	8	8	
Uruguay	(2)	(2)	(2)	(2)	(2)	(2)	(2)	
Total	74	234	233	223	186			

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[1] Five-year average, except in a few cases where five-year statistics were unavailable

[2] Less than 500 acres.

RYE—Continued.

TABLE 18.—Area in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
EUROPE								
Austria	[2] 5,019	[3] 3,138	[3] 3,120	[4] 3,866	820	773	717	--------
Hungary proper [2]	2,601	2,638	2,625	--------	--------	--------	--------	[5] 1,248
Croatia-Slavonia [2]	185	163	--------	--------	--------	--------	--------	--------
Bosnia-Herzegovina [2]	39	--------	--------	--------	--------	--------	--------	--------
Belgium	644	645	--------	--------	--------	--------	496	506
Bulgaria [2]	530	527	507	465	442	475	[5] 446	[5] 417
Czecho-Slovakia	--------	--------	--------	--------	--------	1,922	[6] 1,816	2,184
Denmark	632	607	521	481	436	543	559	519
Finland	[7] 592	--------	--------	--------	--------	--------	602	602
France [2]	2,960	2,614	2,309	2,149	1,834	1,746	[8] 1,907	[8] 2,001
Alsace-Lorraine	135	139	116	--------	--------	67	130	--------
Germany [2]	15,387	15,565	15,843	[8] 4,737	[8] 13,650	[8] 14,200	[8] 10,842	[8] 10,703
Greece	[9] 13	12	13	[10] 16	[11] 56	--------	58	--------
Italy	303	303	294	285	279	270	272	281
Jugo-Slavia	--------	--------	--------	--------	--------	682	682	948
Luxemburg	26	26	24	23	17	17	26	--------
Netherlands	557	563	546	499	463	472	481	489
Norway	37	--------	48	48	58	37	37	37
Roumania [2]	317	208	187	200	--------	[12] 624	[13] 748	[14] 680
Russia proper [2]	64,575	65,967	59,766	55,637	--------	--------	--------	--------
Poland	[2] 5,261	[15] 1,676	--------	--------	--------	--------	[16] 8,424	[16] 8,162
Northern Caucasia [2]	547	439	328	--------	--------	--------	--------	--------
Serbia [2]	114	74	--------	--------	--------	--------	--------	--------
Spain	1,987	1,887	1,820	1,846	1,805	1,818	1,809	1,920
Sweden	977	981	965	913	819	948	919	914
Switzerland	60	61	66	44	49	49	54	50
United Kingdom	61	67	62	60	64	116	122	108
Total	103,424	--------	--------	--------	--------	--------	--------	--------
ASIA								
Russia:								
Central Asia [2] (4 governments)	176	133	340	--------	--------	--------	--------	--------
Siberia [2] (4 governments)	2,273	2,676	2,452	--------	--------	--------	--------	--------
Transcaucasia [2] (1 government)	2	1	1	--------	--------	--------	--------	--------
Total Russia	2,451	2,810	2,793	--------	--------	--------	--------	--------
AUSTRALASIA								
Australia:								
Queensland	(17)	(17)	(17)	(17)	(17)	--------	(17)	--------
New South Wales	4	5	3	3	2	(17)	1	--------
Victoria	2	2	2	3	3	2	1	--------
South Australia	1	1	1	3	2	(17)	1	--------
Western Australia	1	1	1	1	1	(17)	(17)	--------
Tasmania	1	1	1	1	1	(17)	(17)	--------
Total	9	10	8	11	9	5	4	--------
New Zealand	5	--------	--------	--------	--------	(17)	(17)	--------
Total Australasia	14	--------	--------	--------	--------	--------	--------	--------
Grand total	108,311	--------	--------	--------	--------	--------	--------	--------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.
[2] Old boundaries.
[3] Excludes Galicia and Bukowina.
[4] Includes Galicia, but excludes Bukowina, Goritz, and Gradisca.
[5] New boundaries.
[6] Bohemia and Moravia.
[7] Census of 1910.
[8] Excludes Alsace-Lorraine.
[9] 1914.
[10] Excludes Macedonia.
[11] Excludes Eastern Macedonia.
[12] Includes Bessarabia; excludes Dobrudja.
[13] Former Kingdom, Bessarabia, and Bukowina.
[14] Former Kingdom, Bessarabia, Bukowina, and Transylvania.
[15] Winter rye in 5 governments only.
[16] Unofficial.
[17] Less than 500 acres.

RYE—Continued.

TABLE 19.—Production in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
NORTH AMERICA								
United States	34,916	42,799	54,050	48,862	62,933	91,041	88,909	69,318
Canada:								
Quebec	234	156	145	118	376	472	578	534
Ontario	1,405	1,341	1,551	1,208	1,207	1,813	2,219	2,350
Manitoba	96	100	208	557	638	3,936	4,089	2,319
Saskatchewan	55	54	203	548	998	1,420	2,000	2,535
Alberta	297	360	375	440	633	826	1,173	3,420
Other	9	6	4	5	5	37	148	148
Total	2,096	2,017	2,486	2,876	3,857	8,504	10,207	11,306
Mexico	70	70	70	70				
Total	37,082	44,886	56,606	51,808				
SOUTH AMERICA								
Argentina	949	3,346	1,811	2,008	858			
Chile	144	151	185	187	92	176	192	
Uruguay	1	5	1	1	1	1	1	
Total	1,094	3,502	1,997	2,196	951			
EUROPE								
Austria	[2] 112,752	[3] 74,555	[3] 51,211	[4] 50,233	10,922	10,604	9,035	
Hungary proper [2]	48,716	42,410	45,975					[5] 16,520
Croatia-Slavonia [2]	2,231	2,082	2,500					
Bosnia-Herzegovina [2]	444	500	600					
Belgium	22,675	23,137	18,000		5,008	5,132	13,681	13,701
Bulgaria [2]	8,553	6,200	7,107	5,356	5,901	4,427	[5] 6,490	[5] 8,931
Czecho-Slovakia							32,734	33,439
Denmark	18,098	10,905	13,001	10,569	8,870	12,726	14,909	12,613
Finland	11,174	11,291	11,270	9,899		[6] 11,031	10,505	9,173
France [2]	48,647	32,002	33,148	33,351	24,768	28,935	[7] 28,736	[7] 33,174
Alsace-Lorraine	3,476	3,041	2,286			1,165	1,841	
Germany [2]	445,222	410,478	360,310	[7] 350,486	[7] 274,677	[7] 315,301	[7] 240,161	[7] 189,556
Greece	[8] 218	138	126	[9] 157	[10] 695		1,081	1,307
Italy	5,328	5,260	4,362	5,342	4,460	[6] 5,232	4,571	4,539
Jugo-Slavia							9,816	18,125
Luxemburg	651	561	497	436	292	422		
Netherlands	16,422	13,471	13,726	12,391	11,958	13,022	14,057	14,222
Norway	974	1,046	829	943	1,159	1,012	984	990
Roumania [2]	4,652	1,959	2,911			[11] 1,694	[12] 10,046	[13] 5.750
Russia proper [2]	791,333	787,625	875,422	843,740				
Poland	[2] 90,949	[2] [14] 27,984					[5] 134,717	[6] 82,[illegible]82
Portugal				2,761	[6] 2,89[illegible]			
Northern Caucasia [2]	7,409	5,469	4,615					
Serbia [2]	1,533	1,000	800					
Spain	27,635	23,950	26,102	28,782	24,365	30,445	23,296	27,830
Sweden	23,859	27,599	23,133	22,929	14,080	19,794	23,074	24,959
Switzerland	1,783	1,724	2,059	1,279	1,468	1,850	1,748	1,622
United Kingdom	1,751	1,800	1,700					
Total Europe	1,692,554							
ASIA								
Russia:								
Central Asia [2] (4 governments)	1,001	1,206	2,785					
Siberia [2] (4 governments)	23,647	35,887	20,143					
Transcaucasia [2] (1 government)	15	11	17					
Total Russia, Asiatic	24,663	37,104	22,945					

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Excludes Galicia and Bukowina.

[4] Includes Galicia, but excludes Bukowina, Goritz, and Gradisca.

[5] New boundaries.

[6] Unofficial.

[8] 1914.

[9] Excludes Macedonia.

[10] Excludes Eastern Macedonia.

[11] Includes Bessarabia; excludes Dobrudja.

[12] Former Kingdom, Bessarabia, and Bukowina.

[13] Former Kingdom, Bessarabia, Bukowina, and Transylvania.

RYE—Continued.

TABLE 19.—Production in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
AUSTRALASIA	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Australia:								
Queensland	2	1	1	1	2	----------	(2)	----------
New South Wales	49	70	36	32	31	----------	12	----------
Victoria	24	20	13	43	43	17	7	----------
South Australia	10	13	6	31	11	4	6	----------
Western Australia	5	4	3	4	4	1	2	----------
Tasmania	18	9	9	17	7	----------	6	----------
Total	108	117	68	128	98	46	33	----------
New Zealand	97	----------	----------	----------	----------	----------	----------	----------
Total Australasia	205	----------	----------	----------	----------	----------	----------	----------
Grand total	1,755,598	----------	----------	----------	----------	----------	----------	----------

[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Less than 500 bushels.

TABLE 20.—World production so far as reported, 1895-1915.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	1,468,212,000	1901	1,416,022,000	1907	1,538,778,000	1913	1,880,387,000
1896	1,499,250,000	1902	1,647,845,000	1908	1,590,057,000	1914	1,596,882,000
1897	1,300,645,000	1903	1,659,961,000	1909	1,747,123,000	1915	1,577,490,000
1898	1,461,171,000	1904	1,742,112,000	1910	1,673,473,000		
1899	1,583,179,000	1905	1,495,751,000	1911	1,753,933,000		
1900	1,557,634,000	1906	1,433,395,000	1912	1,886,517,000		

FLAX.

TABLE 21.—Flaxseed: Acreage, production, and total farm value, by States, 1920.

State	Acreage	Average yield per acre	Production	Average farm price per bushel Dec. 1	Farm value Dec. 1
	Acres	Bushels	Bushels	Cents	Dollars
Wisconsin	9,000	11.0	99,000	212	210,000
Minnesota	320,000	9.5	3,040,000	183	5,563,000
Iowa	12,000	10.0	120,000	180	216,000
Missouri	6,000	7.5	45,000	200	90,000
North Dakota	735,000	5.3	3,896,000	178	6,935,000
South Dakota	220,000	10.0	2,200,000	165	3,630,000
Nebraska	5,000	9.0	45,000	155	70,000
Kansas	23,000	6.9	159,000	180	286,000
Montana	451,000	3.0	1,353,000	175	2,368,000
Wyoming	4,000	8.2	33,000	135	45,000
United States	1,785,000	6.2	10,990,000	176.6	19,413,000

FLAX—Continued.

TABLE 22.—Area and production in undermentioned countries, 1909-1919.

Country	Area				Production							
					Seed				Fiber			
	Average,[1] 1909-1913	1917	1918	1919	Average,[1] 1909-1913	1917	1918	1919	Average,[1] 1909-1913	1917	1918	1919
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 bush.	1,000 bush	1,000 bush.	1,000 bush.	1,000 lbs.	1,000 lbs.	1,000 lbs.	1,000 lbs.
NORTH AMERICA												
United States	2,490	1,984	1,910	1,572	19,505	9,164	13,369	7,661	------	------	------	------
Canada:												
Quebec	1	6	7	11	11	47	83	111	------	------	------	------
Ontario	8	4	16	14	128	52	196	130	------	------	------	------
Manitoba	58	16	108	57	706	147	1,091	520	------	------	------	------
Saskatchewan	893	754	841	930	10,393	4,710	4,205	4,490	------	------	------	------
Alberta	76	140	96	81	830	979	480	222	------	------	------	------
Total Canada	1,036	920	1,068	1,093	12,068	5,935	6,055	5,473	------	------	------	------
Mexico	------	------	------	------	150	------	------	------	------	------	------	------
Total	3,526	2,904	2,978	2,665	31,723	15,099	19,424	13,134	------	------	------	------
SOUTH AMERICA												
Argentina	3,683	3,207	3,229	3,419	31,989	4,032	19,588	30,775	------	------	------	------
Uruguay	106	36	30	51	793	122	333	498	------	------	------	------
Total	3,789	3,243	3,259	3,470	32,782	4,154	19,921	31,273	------	------	------	------
EUROPE												
Austria	[2] 97	14	13	------	[2] 694	45	35	------	[2] 53,096	------	------	------
Hungary [2]	24	------	------	------	196	------	------	------	20,548	------	------	------
Croatia-Slavonia [2]	17	------	------	------	21	------	------	------	8,046	------	------	------
Bosnia-Herzegovina [2]	------	------	------	------	4	------	------	------	1,080	------	------	------
Belgium	50	------	------	48	443	------	------	407	46,487	------	------	29,982
Bulgaria [2]	1	------	1	------	7	------	------	------	524	------	------	------
Czecho-Slovakia	------	------	------	[3] 37	------	------	------	[3] 218	------	------	------	------
France [2]	61	20	28	[4] 38	533	159	18	[4] 347	40,623	10,060	15,110	[4] 35,298
Ireland	53	108	143	96	------	------	------	------	23,701	34,410	35,175	30,734
Italy	22	20	21	17	320	32	47	433	6,289	5,291	5,291	2,425
Netherlands	33	30	14	2	374	22	14	------	17,276	11,756	6,559	11,323
Roumania [2]	52	------	[5] 186	[6] 4	509	------	[5] 29	[7] 305	4,864	------	[5] 4,453	[7] 2,293
Russia proper [2]	3,217	------	------	------	19,772	------	------	------	1,022	------	------	------
Poland [2]	88	------	------	------	874	------	------	------	42,450	------	------	------
Northern Caucasia [2]	104	------	------	------	679	------	------	------	26,130	------	------	------
Serbia [2]	4	------	------	------	------	------	------	------	1,812	------	------	------
Spain	------	4	4	2	------	9	65	42	------	------	6,768	970
Sweden	4	------	5	------	1	--	------	------	1,208	------	------	------
Total	3,827	------	------	------	24,4	--	------	------	295,156	------	------	------
ASIA												
British India [8]	3,821	3,564	3,797	1,989	19,779	21,040	20,600	9,250	------	------	------	------
Japan	12	48	85	------	------	------	------	------	30,187	101,435	143,027	------
Central Asia (4 governments)	120	------	------	------	510	------	------	------	51,864	------	------	------
Serbia (4 governments)	147	------	------	------	852	------	------	------	38,109	------	------	------
Transcaucasia (1 government)	18	------	------	------	94	------	------	------	6,429	------	------	------
Total	4,118	------	------	------	21,229	------	------	------	126,589	------	------	------
AFRICA												
Algeria	1	1	------	1	11	------	------	7	------	------	------	------
Grand total	15,261	------	------	------	110,180	------	------	------	421,745	------	------	------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Bohemia and Moravia.

[4] Does not include Alsace-Lorraine.

[5] Includes Bessarabia; excludes Dubrudja.

[6] Former Kingdom and Bessarabia.

[7] Former Kingdom, Bessarabia and Bukowina.

[8] Includes some native States.

FLAX—Continued.

TABLE 23.—Flax (seed and fiber): World production so far as reported.

Year	Production		Year	Production	
	Seed	Fiber		Seed	Fiber
	Bushels	Pounds		Bushels	Pounds
1896	82,684,000	1,714,205,000	1906	88,165,000	1,871,723,000
1897	57,596,000	1,498,054,000	1907	102,960,000	2,042,390,000
1898	72,938,000	1,780,693,000	1908	100,850,000	1,907,591,000
1899	66,348,000	1,138,763,000	1909	100,820,000	1,384,524,000
1900	62,432,000	1,315,931,000	1910	85,253,000	913,112,000
1901	72,314,000	1,050,260,000	1911	101,339,000	1,011,350,000
1902	83,891,000	1,564,840,000	1912	130,291,000	1,429,967,000
1903	110,455,000	1,492,383,000	1913	132,477,000	1,384,757,000
1904	107,743,000	1,517,922,000	1914	94,559,000	1,044,746,000
1905	100,458,000	1,494,229,000	1915	103,287,000	975,685,000

POTATOES.

TABLE 24.—Acreage, production, and total farm value, by States, 1920.
[000 omitted]

State	Acreage	Production	Farm value Dec. 1	State	Acreage	Production	Farm value Dec. 1
	Acres	Bushels	Dollars		Acres	Bushels	Dollars
Maine	123	22,140	27,675	North Dakota	90	7,110	6,968
New Hampshire	15	1,950	2,022	South Dakota	84	8,904	8,637
Vermont	27	3,510	4,388	Nebraska	85	8,415	10,098
Massachusetts	32	4,000	6,000	Kansas	68	5,780	8,670
Rhode Island	3	345	552	Kentucky	65	6,435	9,652
Connecticut	24	2,760	4,140	Tennessee	43	3,569	5,710
New York	370	46,250	54,575	Alabama	48	3,216	6,432
New Jersey	95	14,820	18,525	Mississippi	16	1,392	2,784
Pennsylvania	317	36,455	45,204	Louisiana	27	1,755	3,563
Delaware	11	1,166	1,166	Texas	45	2,340	5,148
Maryland	60	6,120	5,814	Oklahoma	42	3,318	5,972
Virginia	126	13,608	12,928	Arkansas	31	2,418	4,232
West Virginia	57	6,840	9,234	Montana	46	5,060	5,313
North Carolina	56	5,040	7,157	Wyoming	27	3,375	4,050
South Carolina	31	3,100	5,580	Colorado	78	10,920	8,736
Georgia	22	1,628	3,386	New Mexico	5	475	998
Florida	25	2,625	5,250	Arizona	5	450	855
Ohio	115	11,500	15,525	Utah	17	3,298	2,638
Indiana	80	7,680	10,214	Nevada	6	1,032	1,610
Illinois	135	8,775	12,724	Idaho	41	7,380	5,018
Michigan	340	35,700	32,844	Washington	56	8,680	8,246
Wisconsin	308	33,264	28,607	Oregon	43	5,590	4,472
Minnesota	295	28,025	22,420	California	95	13,015	19,522
Iowa	104	11,440	13,957				
Missouri	95	7,790	11,763	United States	3,929	430,458	500,974

POTATOES—Continued.

TABLE 25.—Area in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
NORTH AMERICA								
United States	3,680	3,711	3,734	3,565	4,384	4,295	3,952	3,929
Canada:								
Prince Edward Island	32	32	31	31	35	32	36	36
Nova Scotia	32	32	34	34	41	51	62	50
New Brunswick	42	44	40	39	46	57	76	78
Quebec	120	115	117	112	227	265	316	311
Ontario	156	154	155	133	142	166	157	158
Manitoba	26	27	30	32	34	45	42	37
Saskatchewan	29	31	35	47	68	60	66	54
Alberta	24	26	28	29	49	44	46	43
British Columbia	14	15	16	15	15	15	18	18
Total	475	476	486	472	657	735	819	785
Mexico	--------	--------	--------	--------	--------	--------	--------	--------
Newfoundland	--------	--------	--------	--------	--------	--------	--------	--------
Total	4,155	--------	--------	--------	--------	--------	--------	--------
SOUTH AMERICA								
Argentina	235	293	306	322	331	333	--------	--------
Chile	66	81	78	79	70	78	78	--------
Total	301	374	384	401	401	411	--------	--------
EUROPE								
Austria	[2] 3,105	[3] 1,774	[3] 1,757	[4] 2,460	287	323	[16] 239	--------
Hungary proper [2]	1,521	1,513	1,577	--------	--------	--------	--------	[5] 622
Croatia Slavonia [2]	193	--------	--------	--------	--------	--------	--------	--------
Bosnia Herzegovina	69	--------	--------	--------	--------	--------	--------	--------
Belgium	390	411	--------	--------	--------	--------	319	331
Bulgaria [2]	8	--------	--------	--------	--------	--------	[5] 19	[5] 15
Czecho-Slovakia	--------	--------	--------	--------	--------	--------	[6] 849	1,512
Denmark	145	151	160	159	143	186	226	216
Finland	184	--------	--------	--------	--------	--------	204	208
Alsace-Lorraine	229	228	219	--------	--------	--------	--------	--------
France [2]	3,841	3,676	3,223	3,163	3,482	2,884	[7] 3,041	[7] 3,332
Germany [2]	8,260	8,367	8,827	[7] 6,782	[7] 6,186	[7] 6,740	[7] 5,387	[7] 6,054
Italy	658	727	725	729	732	739	763	741
Jugo-Slavia	--------	--------	--------	--------	--------	--------	--------	349
Luxemburg	36	37	36	34	27	25	--------	--------
Malta	4	4	3	3	--------	--------	--------	--------
Netherlands	414	424	438	413	419	405	426	421
Norway	102	104	113	114	145	133	132	132
Roumania [2] [8]	28	26	28	35	--------	[9] 78	[10] 142	[11] 248
Do, [2] [12]	58	56	52	--------	--------	[13] 38	[14] 38	--------
Russia proper [2]	8,302	8,652	6,815	5,879	--------	--------	--------	--------
Poland [2]	2,628	--------	--------	--------	--------	--------	[15] 3,042	[16] 4,129
Northern Caucasia [2]	197	204	165	--------	--------	--------	--------	--------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Excludes Galicia and Bukowina.

[4] Includes Galicia, but excludes Bukowina, Goritz, and Gradisca.

[5] New boundaries.

[6] Bohemia and Moravia only.

[7] Excludes Alsace-Lorraine.

[8] Grown alone.

[9] Former Kingdom and Bessarabia.

[10] Former Kingdom, Bessarabia, and Bukowina.

[11] Former Kingdom, Bessarabia, Bukowina, and Transylvania.

[12] Grown with corn.

[13] Excludes Dobrudja.

[14] Former Kingdom only.

[15] Includes Congress Poland, Eastern and Western Galicia, and Gradisca.

[16] Unofficial.

POTATOES—Continued.

TABLE 25.—Area in undermentioned countries, 1909-1920—Continued.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
EUROPE—Continued								
Serbia [2]	30	----------	----------	----------	----------	----------	----------	----------
Spain	687	688	734	744	839	728	805	805
Sweden	379	375	382	373	397	398	417	365
Switzerland	186	137	159	200	140	168	136	123
United Kingdom:								
England	408	436	437	400	473	597	446	517
Scotland	145	152	144	130	148	169	155	162
Wales	26	25	26	28	35	37	29	28
Ireland	590	583	594	586	709	702	589	584
Total	1,169	1,196	1,201	1,144	1,365	1,505	1,219	1,291
Total Europe	32,594	----------	----------	----------	----------	----------	----------	----------
ASIA								
Japan	174	205	225	254	299	324	343	334
Russia:								
Central Asia [2] (4 governments)	99	104	106	----------	----------	----------	----------	----------
Siberia [2] (4 governments)	298	441	296	----------	----------	----------	----------	----------
Transcaucasia [2] (1 government)	2	2	2	----------	----------	----------	----------	----------
Total Asia	573	752	629	----------	----------	----------	----------	----------
AFRICA								
Algeria	45	----------	----------	----------	27	----------	44	42
Union of South Africa	62	----------	----------	----------	110	----------	----------	----------
Total	107	----------	----------	----------	137	----------	----------	----------
AUSTRALASIA								
Australia:								
Queensland	8	10	8	6	9	11	6	----------
New South Wales	39	39	30	20	22	23	21	----------
Victoria	55	75	65	57	74	67	52	----------
South Australia	8	11	8	4	5	4	3	----------
Western Australia	3	5	5	5	6	4	4	----------
Tasmania	24	31	32	29	34	27	25	----------
Total	137	171	148	121	150	136	111	----------
New Zealand	28	29	22	30	26	23	----------	----------
Total Australasia	165	200	170	150	176	159	----------	----------
Grand Total	37,895	----------	----------	----------	----------	----------	----------	----------

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

POTATOES—Continued.

TABLE 26.—Production in undermentioned countries, 1909-1920.

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
NORTH AMERICA								
United States	356,627	409,921	359,721	286,953	442,108	411,860	355,773	430,458
Canada:								
Prince Edward Island	5,901	6,806	3,558	6,386	6,125	5,362	4,529	6,175
Nova Scotia	6,627	7,165	4,759	6,935	7,173	9,776	9,992	10,209
New Brunswick	8,898	10,534	5,772	7,488	6,891	9,078	10,790	15,510
Quebec	19,723	21,811	17,510	14,672	18,158	38,936	57,280	57,633
Ontario	20,720	25,772	14,362	8,113	18,981	19,376	15,145	23,962
Manitoba	4,755	3,172	2,565	4,709	3,643	8,325	5,288	3,410
Saskatchewan	4,812	4,085	3,847	7,319	9,010	6,951	11,250	6,861
Alberta	3,934	3,652	4,024	4,783	7,409	3,119	8,241	7,138
British Columbia	3,128	2,675	3,956	2,892	2,502	3,423	3,060	2,934
Total	78,498	85,672	60,353	63,297	79,892	104,346	125,575	133,832
Mexico	924	--------	--------	540	--------	328	452	--------
Newfoundland	1,495	--------	--------	--------	--------	--------	--------	--------
Total	437,544	--------	--------	--------	--------	--------	--------	--------
SOUTH AMERICA								
Argentina	40,216	28,366	29,597	31,138	--------	--------	--------	--------
Chile	8,023	9,169	9,546	11,598	9,091	9,768	[7] 8,700	[7] 10,944
Total	48,239	37,535	39,143	42,736	--------	--------	--------	--------
EUROPE								
Austria	[2] 456,485	[3] 285,070	[3] 232,203	[4] 229,048	32,890	21,495	[7] 20,022	--------
Hungary proper [2]	180,103	195,266	209,356	--------	--------	--------	--------	[5] 71,568
Croatia-Slavonia [2]	22,254	--------	--------	--------	--------	--------	--------	--------
Bosnia-Herzegovina [2]	3,359	--------	--------	--------	--------	--------	--------	--------
Belgium	107,021	--------	--------	--------	--------	--------	76,064	57,094
Bulgaria	[2] 454	--------	--------	--------	--------	--------	--------	2,023
Czecho-Slovakia	--------	--------	--------	--------	--------	--------	[6] 79,566	--------
Denmark	32,440	37,331	42,349	26,629	31,882	40,605	53,087	--------
Finland	20,975	18,736	20,531	19,666	--------	[7] 22,569	17,718	17,865
France [2]	489,377	440,652	332,788	332,647	401,336	228,433	[8] 284,047	[8] 379,029
Alsace-Lorraine	37,417	32,082	39,983	--------	--------	12,044	27,598	--------
Germany [2]	1,681,959	1,674,377	1,983,161	[8] 907,236	[8] 1,264,374	[8] 1,082,816	[8] 788,115	[9] 750,885
Jugo-Slavia	--------	--------	--------	--------	--------	--------	--------	38,452
Italy	60,813	61,104	56,768	54,277	48,112	51,808	50,981	51,440
Luxemburg	6,439	5,288	6,422	2,971	5,925	4,731	--------	--------
Malta	672	1,080	568	356	--------	--------	--------	--------
Netherlands	110,153	120,780	126,741	105,040	130,288	109,655	96,225	91,303
Norway	24,821	27,542	19,957	31,310	42,584	28,954	37,912	30,811
Roumania [2] [10]	3,634	2,654	3,765	--------	--------	2,341	[11] 10,422	[12] 3,226
Do. [2] [13]	1,144	1,083	865	--------	--------	[14] 250	[15] 401	--------
Russia proper [2]	862,798	891,579	770,709	662,169	--------	--------	--------	--------
Poland [2]	373,917	--------	--------	--------	--------	--------	[16] 390,325	[7] 703,194
Northern Caucasia [2]	15,663	17,907	15,796	--------	--------	--------	--------	--------
Serbia [2]	2,201	--------	--------	--------	--------	--------	--------	--------
Spain	93,413	76,657	101.037	108,991	113,477	95,562	102,418	104,761
Sweden	60,327	63,209	71,756	54,972	83,700	71,129	77,573	60,259
Switzerland	40,537	22,046	30,681	18,372	38,580	43,355	27,925	28,256

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[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

[3] Excludes Galicia and Bukowina.

[4] Includes Galicia, but excludes Bukowina, Goritz, and Gradisca.

[5] New boundaries.

[6] Bohemia and Moravia only.

[7] Unofficial.

[8] Excludes Alsace-Lorraine.

[9] Prussia only.

[10] Grown alone.

[11] Former Kingdom, Bessarabia, and Bukowina.

[12] Bessarabia only.

[13] Grown with corn.

[14] Excludes Dobrudja.

[15] Former Kingdom only.

[16] Includes Congress Poland, Eastern and Western Galicia, and Posen.

POTATOES—Continued.

TABLE 26.—Production in undermentioned countries, 1909-1920—Continued

Country	Average[1] 1909-1913	1914	1915	1916	1917	1918	1919	1920
EUROPE—Continued	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
United Kingdom:								
England	94,487	104,804	100,881	88,484	117,351	148,848	95,984	113,419
Scotland	34,674	40,230	36,291	19,825	41,443	42,971	31,061	46,181
Wales	5,403	5,445	5,821	5,018	7,380	8,288	6,048	3,696
Ireland	119,874	128,642	138,509	90,845	155,036	144,231	102,539	74,141
Total United Kingdom	254,438	279,121	281,502	204,172	321,210	344,338	235,632	237,437
Total	4,905,397							
ASIA								
Japan	24,738	32,312	35,103	38,613	36,924	41,275	67,236	47,278
Russia:								
Central Asia [2] (4 governments)	5,230	7,560	7,974					
Siberia [2] (4 governments)	27,773	47,075	24,307					
Transcaucasia [2] (1 government)	148	90	100					
Total Russia	33,151	54,725	32,381					
Total Asia	57,889	87,037	67,484					
AFRICA								
Algeria	1,783				2,756			985
Union of South Africa	3,269					3,909	3,649	
Total	5,052							
AUSTRALASIA								
Australia:								
New South Wales	3,378	3,989	1,520	1,658	1,691	1,865	1,133	
Queensland	524	618	598	278	726	827	413	
Victoria	5,983	6,593	7,064	6,489	7,018	6,802	5,136	
South Australia	894	1,230	673	485	759	422	493	
Western Australia	309	665	550	527	629	423	437	
Tasmania	2,989	3,001	2,946	2,983	2,503	2,630	2,110	
Total	14,077	16,096	13,351	12,420	13,326	12,969	9,722	
New Zealand	6,047	5,869	4,952	4,809	4,992	3,756		
Total Australasia	20,124	21,965	18,303	17,229	18,318	16,725		
Grand Total	5,474,245							

[1] Five-year average, except in a few cases where five-year statistics were unavailable.

[2] Old boundaries.

TABLE 27.—World production so far as reported, 1900-1915.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1900	4,282,031,000	1904	4,208,019,000	1908	5,205,043,000	1912	5,872,053,000
1901	4,660,078,000	1905	5,251,508,000	1909	5,505,567,000	1913	5,802,010,000
1902	4,671,006,000	1906	4,780,112,000	1910	5,242,978,000	1914	5,016,901,000
1903	4,409,793,000	1907	5,192,078,000	1911	4,842,109,000	1915	5,361,898,000

HAY.

TABLE 28.—Acreage, production, and total farm value, by States, 1920.

[000 omitted]

State	Acreage	Production	Farm value Dec. 1	State	Acreage	Production	Farm value Dec. 1
	Acres	Tons	Dollars		Acres	Tons	Dollars
Maine	1,168	1,191	29,299	North Dakota	715	894	8,851
New Hampshire	450	540	13,500	South Dakota	1,000	1,750	14,875
Vermont	910	1,320	30,360	Nebraska	1,619	4,209	37,881
Massachusetts	436	610	17,080	Kansas	1,780	3,702	37,760
Rhode Island	46	51	1,693	Kentucky	1,093	1,497	32,934
Connecticut	355	462	13,860	Tennessee	1,430	2,002	41,041
New York	4,386	5,482	129,375	Alabama	1,445	1,329	25,916
New Jersey	330	544	14,960	Mississippi	417	709	12,195
Pennsylvania	2,822	3,951	92,848	Louisiana	280	490	7,840
Delaware	86	120	2,580	Texas	662	1,092	14,633
Maryland	472	732	18,300	Oklahoma	730	1,752	18,396
Virginia	950	1,235	29,022	Arkansas	660	957	15,312
West Virginia	800	1,000	24,200	Montana	842	1,516	18,192
North Carolina	897	1,310	30,130	Wyoming	740	1,850	22,200
South Carolina	450	450	11,250	Colorado	1,236	2,966	35,592
Georgia	660	759	17,836	New Mexico	240	600	10,200
Florida	115	132	2,508	Arizona	123	381	11,049
Ohio	3,150	4,252	82,914	Utah	472	1,265	16,445
Indiana	2,205	2,844	54,889	Nevada	200	486	7,776
Illinois	3,264	4,080	84,048				
				Idaho	750	2,250	28,125
Michigan	2,624	3,149	66,129	Washington	810	1,620	29,970
Wisconsin	2,832	4,814	98.206	Oregon	900	2,160	31.320
Minnesota	2,020	3,434	38,461	California	2,175	5,002	100,040
Iowa	3,021	4,350	70,644				
Missouri	3,147	3,902	61,261	United States	57,915	91,193	1,613,896

CLOVER SEED.

TABLE 29.—Acreage, production, and value, by States, 1920, and totals, 1916-1919.

State and year	Acreage	Average yield per acre	Production	Average farm price per bushel Nov. 15	Farm value Nov. 15
	Acres	Bushels	Bushels	Dollars	Dollars
New York	15,000	2.4	36,000	13.00	468,000
Pennsylvania	9,000	1.6	14,000	12.90	181,000
Ohio	150,000	1.3	195,000	12.30	2,398,000
Indiana	95,000	1.5	142,000	10.90	1,548,000
Illinois	196,000	1.7	333,000	10.95	3,646,000
Michigan	80,000	1.5	120,000	10.60	1,272,000
Wisconsin	169,000	2.0	338,000	11.50	3,887,000
Minnesota	20,000	2.2	44,000	12.90	568,000
Iowa	134,000	2.0	268,000	12.25	3,283,000
Missouri	35,000	2.2	77,000	10.80	832,000
Nebraska	5,000	2.3	12,000	16.00	192,000
Kansas	7,000	2.2	15,000	9.80	147,000
Kentucky	25,000	2.1	52.000	15.00	780,000
Tennessee	5,000	1.6	8,000	15.00	120,000
Idaho	16,000	5.5	88,000	11.25	990.000
Oregon	5,000	3.6	18,000	12.00	216,000
Total	966,000	1.8	1,760,000	11.66	20,528,000
1919	843,000	1.6	1,341,000	26,50	35,541,000
1918	820,000	1.5	1,197,000	19,80	23,705,000
1917	821,000	1.8	1,488,000	12.84	19,107,000
1916	939,000	1.8	1,706,000	9.18	15,661,000

APPLES.

TABLE 30.—Production and prices, Dec. 1, by States, 1917-1920..

State	Total crop (000 omitted)				Price per bushel Dec. 1			
	1920	1919	1918	1917	1920	1919	1918	1917
	Bushels	Bushels	Bushels	Bushels	Cents	Cents	Cents	Cents
Maine	1,930	5,558	2,010	4,275	120	117	95	95
New Hampshire	1,320	1,510	1,155	1,035	150	160	110	120
Vermont	1,600	1,500	990	1,248	150	175	140	130
Massachusetts	3,680	3,240	2,430	2,163	120	200	160	155
Rhode Island	340	294	189	195	200	195	155	150
Connecticut	2,520	1,572	999	1,251	125	170	155	144
New York	55,650	16,800	40,878	16,266	75	200	112	132
New Jersey	4,134	2,113	2,463	2,058	120	200	160	125
Pennsylvania	23,937	7,972	16,080	11,646	90	225	120	126
Delaware	1,017	750	714	798	95	200	125	110
Maryland	3,330	1,944	2,034	2,559	78	200	110	97
Virginia	15,210	9,950	10,068	11,778	90	160	124	101
West Virginia	7,000	3,478	5,856	4,320	125	180	117	122
North Carolina	7,900	2,500	3,588	4,500	105	187	130	114
South Carolina	1,482	700	1,407	1,635	184	280	205	155
Georgia	1,764	636	1,713	1,713	165	245	165	120
Ohio	13,193	2,806	7,005	5,760	115	262	153	150
Indiana	6,097	1,700	1,794	4,836	143	267	180	121
Illinois	6,175	4,943	3,459	7,518	140	230	185	110
Michigan	16,500	6,484	9,792	4,146	77	220	115	140
Wisconsin	3,650	2,700	2,811	3,090	170	220	155	134
Minnesota	1,462	1,365	996	1,446	200	250	209	155
Iowa	4,410	1,815	1,584	3,795	191	275	206	145
Missouri	5,082	5,773	4,245	8,070	170	190	164	106
South Dakota	323	302	273	336	260	300	235	170
Nebraska	750	1,125	525	1,854	230	250	230	140
Kansas	1,144	1,835	1,503	2,853	220	210	190	135
Kentucky	5,780	1,480	2,799	5,802	160	250	170	117
Tennessee	5,304	1,560	4,050	4,170	142	225	156	122
Alabama	1,260	617	1,662	1,449	175	250	170	140
Mississippi	126	144	--------	--------	190	235	--------	--------
Texas	351	624	273	357	200	190	160	156
Oklahoma	548	1,512	660	1,293	230	175	201	130
Arkansas	3,620	5,100	1,290	2,574	140	170	140	135
Montana	1,155	1,289	792	1,044	180	175	210	100
Colorado	2,760	3,418	2,067	2,190	140	185	170	80
New Mexico	566	1,329	912	879	180	200	118	150
Arizona	100	154	138	129	250	225	240	205
Utah	918	779	786	906	120	170	140	80
Idaho	3,631	4,300	1,200	3,843	145	180	170	95
Washington	13,420	25,348	16,491	19,830	140	155	125	125
Oregon	3,300	5,579	3,384	4,335	125	140	110	105
California	6,003	8,640	6,560	6,804	160	145	130	115
United States	240,442	153,238	169,625	166,749	113.1	186.0	132.8	121.7

TABLE 31.—Total production (bushels) in the United States, 1889-1920.

Year	Production	Year	Production	Year	Production	Year	Production
1889 [1]	143,105,000	1897	163,728,000	1905	136,220,000	1913	145,410,000
1890	80,142,000	1898	118,061,000	1906	216,720,000	1914	253,200,000
1891	198,907,000	1899 [1]	175,397,000	1907	119,560,000	1915	230,011,000
1892	120,536,000	1900	205,930,000	1908	148,940,000	1916	193,905,000
1893	114,773,000	1901	135,500,000	1909 [1]	146,122,000	1917	166,749,000
1894	134,648,000	1902	212,330,000	1910	141,640,000	1918	169,625,000
1895	219,600,000	1903	195,680,000	1911	214,020,000	1919	153,238,000
1896	232,600,000	1904	233,630,000	1912	235,220,000	1920	240,442,000

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[1] Census figures.

LIVE STOCK, 1920

COMPILED IN THE U. S. BUREAU OF CROP ESTIMATES
HORSES AND MULES.

TABLE 32.—Number and value on farms, Jan. 1, 1920 and 1921, by States.

State	Horses						Mules					
	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—		Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—	
	1921	1920	1921	1920	1921	1920	1921	1920	1921	1920	1921	1920
Maine	104	105	$144.00	$154.00	$ 14,976	$ 16,170	-----	-----	-------	-------	-------	-------
New Hampshire	39	40	132.00	144.00	5,148	5,760	-----	-----	-------	-------	-------	-------
Vermont	84	84	122.00	141.00	10,248	11,844	-----	-----	-------	-------	-------	-------
Massachusetts	47	50	150.00	155.00	7,050	7,750	-----	-----	-------	-------	-------	-------
Rhode Island	7	7	149.00	160.00	1,043	1,120	-----	-----	-------	-------	-------	-------
Connecticut	39	41	146.00	165.00	5,694	6,765	-----	-----	-------	-------	-------	-------
New York	543	560	127.00	141.00	68,961	78,960	7	7	$135.00	$148.00	$ 945	$ 1,036
New Jersey	87	88	141.00	150.00	12,267	13,200	5	5	160.00	171.00	800	855
Pennsylvania	549	560	118.00	123.00	64.782	68,880	45	46	141.00	141.00	6,345	6,486
Delaware	33	34	77.00	83.00	2,541	2,822	6	6	110.00	111.00	660	666
Maryland	158	165	95.00	102.00	15,010	16,830	25	25	124.00	134.00	3,100	3,350
Virginia	351	362	96.00	108.00	33,696	39,096	65	65	126.00	136.00	8,190	8,840
West Virginia	184	190	98.00	104.00	18,032	19,760	13	13	114.00	121.00	1,482	1,573
North Carolina	179	183	122.00	153.00	21,838	27,999	231	236	154.00	190.00	35,574	44,840
South Carolina	79	80	134.00	180.00	10,586	14,400	217	215	186.00	231.00	40,362	49,665
Georgia	132	132	112.00	159.00	14,784	20,988	347	351	153.00	216.00	53,091	75,816
Florida	58	60	123.00	140.00	7,134	8,400	40	40	167.00	196.00	6,680	7,840
Ohio	795	811	104.00	109.00	82,680	88,399	28	28	113.00	120.00	3,164	3.360
Indiana	788	804	91.00	101.00	71,708	81,204	93	95	112.00	128.00	10,416	12,160
Illinois	1,324	1,394	82.00	94.00	108,568	131,036	146	147	102.00	125.00	14,892	18,375
Michigan	614	640	93.00	95.00	57,102	60,800	4	4	96.00	99.00	384	396
Wisconsin	674	680	103.00	109.00	69,422	74.120	3	3	99.00	112.00	297	336
Minnesota	920	940	83.00	91.00	76,360	85,540	6	6	93.00	99.00	558	594
Iowa	1,328	1.398	81.00	89.00	107,568	124,422	71	71	108.00	121.00	7,668	8,591
Missouri	1,030	1,040	71.00	83.00	73,130	86,320	367	378	95.00	120.00	34,865	45,360
North Dakota	800	825	62.00	81.00	49,600	66,825	9	9	85.00	98.00	765	882
South Dakota	786	819	61.00	71.00	47,946	58,149	14	15	82.00	94.00	1,148	1,410
Nebraska	965	995	69.00	75.00	66,585	74,625	99	106	92.00	109.00	9,108	11,554
Kansas	1,108	1,153	66.00	79.00	73,128	91,087	250	260	90.00	117.00	22,500	30,420
Kentucky	420	429	84.00	101.00	35,280	43,329	250	250	107.00	126.00	26,750	31,500
Tennessee	338	345	90.00	113.00	30,420	38,985	277	280	108.00	139.00	29,916	38,920
Alabama	158	158	89.00	128.00	14,062	20,224	322	316	112.00	171.00	36,064	54,036
Mississippi	256	261	87.00	113.00	22,272	29,493	312	322	119.00	152.00	37,128	48,944
Louisiana	211	215	84.00	107.00	17,724	23,005	166	166	140.00	164.00	23,240	27,224
Texas	1,187	1,199	75.00	96.00	89,025	115,104	792	784	107.00	140.00	84,744	109,760
Oklahoma	667	710	63.00	83.00	42,021	58,930	292	295	89.00	120.00	25,988	35,400
Arkansas	258	266	75.00	97.00	19,350	25,802	327	324	105.00	132.00	34,335	42,768
Montana	520	520	49.00	60.00	25,480	31,200	5	5	76.00	80.00	380	400
Wyoming	189	210	46.00	53.00	8,694	11,130	4	4	77.00	90.00	308	360
Colorado	408	421	62.00	79.00	25,296	33,259	30	31	89.00	101.00	2,670	3,131
New Mexico	225	232	58.00	68.00	13,050	15,776	21	20	88.00	104.00	1,848	2,080
Arizona	120	120	85.00	70.00	10,200	8,400	12	12	124.00	106.00	1,488	1,272
Utah	145	145	75.00	78.00	10,875	11,310	3	3	71.00	73.00	213	219
Nevada	74	75	57.00	60.00	4,218	4,500	3	3	64.00	64.00	192	192
Idaho	262	270	68.00	77.00	17,816	20.790	5	5	76.00	91.00	380	455
Washington	284	290	80.00	92.00	22,720	26,680	20	21	90.00	106.00	1,800	2,226
Oregon	276	279	81.00	85.00	22,356	23,715	10	10	91.00	91.00	910	910
California	380	400	94.00	94.00	35,720	37,600	57	59	125.00	122.00	7,125	7,198
United States	20,183	20,785	82.45	94.42	1,664,166	1,962,503	4,999	5,041	115.72	147.07	578,473	741,400

CATTLE.

TABLE 33.—Number and value on farms Jan. 1, 1920 and 1921, by States.

State	Milk cows						Other cattle					
	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—		Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—	
	1921	1920	1921	1920	1921	1920	1921	1920	1921	1920	1921	1920
Maine	171	176	$60.00	$79.00	$ 10,260	$ 13,904	129	140	$27.30	$35.90	$ 3,522	$ 5,026
New Hampshire	101	103	74.00	86.00	7,474	8,858	70	70	31.90	41.70	2,233	2,919
Vermont	275	275	65.00	89.00	17,875	24,475	186	190	24.50	37.20	4,557	7,068
Massachusetts	157	159	94.00	105.00	14,758	16,695	100	100	37.30	44.80	3,730	4,480
Rhode Island	18	19	100.00	110.00	1,800	2,090	12	13	36.00	46.90	432	610
Connecticut	117	118	90.00	105.00	10,530	12,390	80	80	41.80	47.70	3,344	3,816
New York	1,448	1,493	73.00	107.00	105,704	159,751	882	909	33.00	48.30	20,106	43,905
New Jersey	151	151	110.00	128.00	16,610	19,328	73	75	49.00	57.00	3,577	4,275
Pennsylvania	951	970	77.00	98.00	73,227	95,060	691	720	35.40	46.00	24,461	33,120
Delaware	45	45	81.00	85.00	3,645	3,825	22	23	40.60	46.80	893	1,076
Maryland	180	180	79.00	89.00	14,220	16,020	136	136	42.90	50.40	5,834	6,854
Virginia	428	428	59.00	76.00	25,252	32,528	567	573	36.70	49.20	20,809	28,192
West Virginia	245	245	66.00	76.00	16,170	18,620	366	373	42.50	51.70	15,555	19,284
North Carolina	331	328	58.00	78.00	19,198	25,584	386	394	26.60	35.30	10,268	13,908
South Carolina	215	213	58.00	85.00	12,470	18,105	254	254	21.80	36.50	5,537	9,271
Georgia	470	461	45.00	65.00	21,150	29,965	763	771	20.00	27.20	15,260	20,971
Florida	156	156	74.00	72.00	11,544	11,232	917	945	21.60	27.30	19,807	25,798
Ohio	1,009	1,030	71.50	92.00	72,144	94,760	996	1,060	37.50	48.70	37,350	51,622
Indiana	727	734	65.00	88.00	47,255	64,592	710	772	38.10	51.60	27,051	39,835
Illinois	1,028	1,060	63.00	96.00	64,764	101,760	1,244	1,367	36.20	54.60	45,033	74,638
Michigan	856	873	70.00	96.00	59,920	83,808	727	773	30.00	42.00	21,810	33,084
Wisconsin	1,828	1,846	65.00	97.00	118,820	179,062	1,478	1,493	26.90	40.20	39,758	60,019
Minnesota	1,395	1,395	58.00	82.00	80,910	114,390	1,661	1,730	20.60	32.60	34,217	56,398
Iowa	1,252	1,291	62.00	88.00	77,624	113,608	2,969	3,192	33.80	49.00	100,352	156,408
Missouri	873	919	57.50	79.00	50,198	72,601	1,659	1,746	34.50	48.90	57,236	85,379
North Dakota	464	464	55.00	77.00	25,520	35,728	604	623	27.70	41.40	16,731	25,792
South Dakota	539	561	56.00	75.00	30,184	42,075	1,297	1,526	29.90	44.30	38,780	67,602
Nebraska	560	577	63.00	83.00	35,280	47,891	2,650	2,850	33.40	45.30	88,510	129,105
Kansas	898	935	62.00	81.00	55,676	75,735	2,075	2,161	33.20	48.00	68,890	103,728
Kentucky	466	457	57.00	73.00	26,562	33,361	562	592	30.10	41.20	16,916	24,390
Tennessee	386	390	49.00	70.00	18,914	27,300	570	600	20.90	32.80	11,913	19,680
Alabama	507	502	40.00	57.00	20,280	28,614	791	842	13.60	22.90	10,758	19,282
Mississippi	571	571	47.00	62.00	26,837	35,402	680	716	14.10	23.50	9,588	16,826
Louisiana	382	378	52.00	67.00	19,864	25,326	725	725	22.10	29.30	16,022	21,242
Texas	1,184	1,138	63.00	77.00	74,592	87,626	4,547	4,458	30.50	41.80	138,684	186,344
Oklahoma	549	560	52.00	68.00	28,548	38,080	1,118	1,300	28.10	41.70	31,416	54,210
Arkansas	429	452	43.00	56.00	18,447	25,312	643	691	14.00	24.40	9,002	16,860
Montana	185	185	75.00	83.00	13,875	15,355	918	1,020	38.30	50.60	35,159	51,612
Wyoming	80	80	75.00	93.00	6,000	7,440	720	800	40.80	50.50	29,376	40,400
Colorado	272	272	70.00	87.00	19,040	23,664	1,220	1,355	34.80	48.10	42,456	65,176
New Mexico	91	87	73.00	83.00	6,643	7,221	1,406	1,378	35.10	45.50	49,351	62,699
Arizona	45	50	105.00	95.00	4,725	4,750	1,100	1,000	38.00	44.00	41,800	44,000
Utah	108	109	70.00	78.00	7,560	8,502	473	493	29.20	39.30	13,812	19,375
Nevada	32	31	86.00	88.00	2,752	2,728	540	535	36.00	45.00	19,440	24,075
Idaho	137	136	72.00	85.00	9,864	11,560	505	537	33.70	44.10	17,018	23,682
Washington	216	225	75.00	88.00	16,200	19,800	290	305	34.30	43.80	9,947	13,359
Oregon	216	220	75.00	83.00	16,200	18,260	675	710	37.50	46.20	25,312	32,802
California	577	571	95.00	97.00	54,815	55,387	1,683	1,634	44.00	51.40	74,052	83,988
United States	23,321	23,619	63.97	85.11	1,491,906	2,010,128	42,870	44,750	31.41	43.22	1,346,665	1,934,185

SHEEP.

TABLE 34.—Number and value on farms Jan. 1, 1920 and 1921, by States.

State	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—	
	1921	1920	1921	1920	1921	1920
Maine	140	165	$ 5.60	$ 9.50	$ 784	$ 1,568
New Hampshire	31	37	7.30	9.80	226	363
Vermont	91	100	6.70	11.50	610	1,150
Massachusetts	28	28	9.50	12.70	266	356
Rhode Island	5	5	10.00	12.20	50	61
Connecticut	22	24	9.60	12.80	211	307
New York	745	810	7.60	12.40	5,662	10,044
New Jersey	29	30	10.70	11.00	310	330
Pennsylvania	856	930	7.60	11.60	6,506	10,788
Delaware	8	9	7.40	10.40	59	94
Maryland	220	245	8.10	10.90	1,782	2,670
Virginia	714	714	7.50	11.50	5,355	8,211
West Virginia	728	766	6.40	10.60	4,659	8,120
North Carolina	138	144	6.60	9.50	911	1,368
South Carolina	26	27	3,80	7.10	99	192
Georgia	119	125	4.10	4.90	488	612
Florida	89	95	3.60	5.20	320	494
Ohio	2,773	2,950	5.80	10.10	16,083	29,795
Indiana	960	1,067	6.70	11.80	6,432	12,591
Illinois	889	1,010	7.00	12.60	6,223	12,726
Michigan	2,135	2,224	6.90	11.80	14,732	26,243
Wisconsin	632	687	6.40	10.80	4,045	7,420
Minnesota	598	650	6.20	11.00	3,708	7,150
Iowa	948	1,019	6.90	12.00	6,541	12,228
Missouri	1,388	1,525	6.00	11.90	8,328	18,148
North Dakota	272	286	6.00	11.00	1,632	3,146
South Dakota	680	850	5.70	10.00	3,876	8,500
Nebraska	290	315	6.30	11.10	1,827	3.496
Kansas	405	506	6.10	11.60	2,470	5,870
Kentucky	1,137	1,236	6.30	10.90	7,163	13,472
Tennessee	526	560	5.60	10.50	2,946	5,880
Alabama	123	137	4.30	5.60	529	767
Mississippi	149	175	3.30	6.30	492	1,102
Louisiana	209	220	3.80	5.40	794	1,188
Texas	3,069	2,790	6.30	9.90	19,335	27,621
Oklahoma	110	110	6.30	11.10	693	1,221
Arkansas	191	201	4.10	7.40	783	1,487
Montana	2,450	2,330	5.80	10.30	14,210	23,999
Wyoming	3,040	3,200	6.30	10.20	19,152	32,640
Colorado	1,973	2,121	5.60	9.80	11,049	20,786
New Mexico	2,666	2,539	6.00	9.30	15,996	23,613
Arizona	1,200	1,200	6.60	9.60	7,920	11,520
Utah	2,245	2,245	6.80	9.80	15,266	22,001
Nevada	1,532	1,596	7.60	10.30	11,643	16,439
Idaho	2,623	2,914	6.20	10.40	16,263	30,306
Washington	645	725	7.10	11.00	4,580	7,975
Oregon	2,270	2,522	6.90	11.00	15,663	27,742
California	2,950	2,950	6.80	10.80	20,060	31,860
United States	45,067	47,114	6.41	10.52	288,732	495,660

WOOL.

TABLE 35.—Estimated production, 1919 and 1920.

State	Production (000 omitted)		Weight per fleece		Number of fleeces (000 omitted)	
	1920	1919	1920	1919	1920	1919
	Pounds	Pounds	Pounds	Pounds	Number	Number
Maine	973	936	6.4	6.4	152	146
New Hampshire	204	202	6.5	6.6	31	31
Vermont	676	690	7.2	7.2	94	96
Massachusetts	131	125	6.5	6.6	20	19
Rhode Island	23	25	6.1	5.8	4	4
Connecticut	96	84	5.6	5.9	17	14
New York	4,083	4.022	6.9	7.0	592	575
New Jersey	109	106	7.0	7.0	16	15
Pennsylvania	4,560	4,863	6.5	7.0	702	655
Delaware	32	31	5.8	5.7	6	5
Maryland	825	812	6.0	6.0	138	135
Virginia	1,680	1,715	4.6	5.0	365	343
West Virginia	3,200	3,150	5.0	5.3	640	594
North Carolina	575	587	4.2	4.4	137	133
South Carolina	103	103	4.5	4.3	23	24
Georgia	418	422	3.2	3.1	131	136
Florida	391	407	3.2	3.5	122	116
Ohio	12,449	13,104	7.4	7.5	1,682	1,747
Indiana	5,306	5,337	7.0	7.4	758	721
Illinois	3,923	4,129	7.8	8.0	503	516
Michigan	10,223	9,554	7.6	7.4	1,345	1,291
Wisconsin	3,360	3,310	7.4	7.6	454	436
Minnesota	3,536	3,594	7.1	7.5	498	479
Iowa	4,908	5,060	7.7	8.0	637	632
Missouri	8,296	8,492	6.8	7.1	1,220	1,196
North Dakota	1,737	1,654	7.5	7.7	232	215
South Dakota	4,804	5,222	7.0	7.5	686	696
Nebraska	1,886	1,730	8.0	7.9	236	219
Kansas	2,087	1,754	7.5	7.6	278	231
Kentucky	3,115	3,211	5.0	5.2	623	618
Tennessee	2,052	2,052	4.8	4.8	428	428
Alabama	364	405	4.0	4.2	91	96
Mississippi	550	656	3.6	4.2	153	156
Louisiana	612	612	3.9	3.9	157	157
Texas	17,600	14,986	7.0	7.2	2,514	2,081
Oklahoma	526	526	7.2	7.4	73	75
Arkansas	443	422	4.5	4.9	98	86
Montana	15,800	17,450	7.9	8.4	2,000	2,077
Wyoming	28,422	31,580	8.3	8.5	3,424	3,715
Colorado	8,184	8,800	6.7	6.6	1,221	1,333
New Mexico	15,528	15,076	6.3	6.3	2,465	2,393
Arizona	5,970	5,580	6.5	6.3	918	885
Utah	16,150	17,000	7.8	7.4	2,071	2,297
Nevada	9,000	10,500	7.3	7.6	1,233	1,382
Idaho	21,702	22,145	8.1	8.4	2,679	2,636
Washington	5,490	5,779	8.7	8.6	631	672
Oregon	14,040	14,040	8.4	8.5	1,671	1,652
California	13,165	13,298	7.6	7.4	1,732	1,797
United States	259,307	265,338	7.2	7.4	35,901	35,956
Pulled wool	42,900	48,300	----------	----------	----------	----------

SWINE.

TABLE 36.—Number and value on farms Jan. 1, 1920 and 1921, by States.

State	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—	
	1921	1920	1921	1920	1921	1920
Maine	97	110	$ 21.00	$ 24.50	2,037	2.695
New Hampshire	57	65	20.00	24.00	1,140	1,560
Vermont	105	115	14.80	22.50	1,554	2,588
Massachusetts	130	150	20.50	27.00	2,665	4,050
Rhode Island	13	15	21.00	30.00	273	450
Connecticut	78	87	20.00	27.50	1,560	2,392
New York	781	840	17.50	22.50	13,668	18,900
New Jersey	182	200	20.00	25.20	3,640	5,040
Pennsylvania	1,339	1,395	17.50	23.70	23,432	33,062
Delaware	68	73	16.00	19.00	1,088	1,387
Maryland	427	450	13.00	19.00	5,551	8,550
Virginia	1,026	1,115	11.50	15.00	11,799	16,725
West Virginia	425	443	14.00	18.00	5,950	7,974
North Carolina	1,528	1,575	15.70	20.00	23,990	31,500
South Carolina	1,099	1,088	13.50	21.50	14,836	23,392
Georgia	3,102	3,165	11.50	16,90	35,673	53,488
Florida	1,493	1,588	10.00	13.00	14,930	20,644
Ohio	3,921	4,309	13.30	19.20	52,149	82,733
Indiana	4,209	4,575	13.00	19.00	54,717	86,925
Illinois	4,585	5,152	13.70	20.50	62,814	105,616
Michigan	1,435	1,450	14.30	22.00	20,520	31,900
Wisconsin	2,236	2,236	14.50	23.50	32,422	52,546
Minnesota	2,803	2,951	15.30	24.00	42,886	70,824
Iowa	9,510	10,010	14.50	21.80	137,895	218,218
Missouri	4,047	4,305	11.00	16.50	44,517	71,032
North Dakota	402	428	14.00	21.00	5,628	8,988
South Dakota	1,525	1,695	13.50	21.50	20,588	36,442
Nebraska	3,063	3,366	13.50	20.90	41,350	70,349
Kansas	1,810	1,905	12.00	17.50	21,720	33,338
Kentucky	1,429	1,681	9.90	13.00	14,147	21,853
Tennessee	1,636	1,925	9.50	15.00	15,542	28,875
Alabama	1,861	2,190	10.00	12.80	18,610	28,032
Mississippi	1,783	2,050	9.50	14.50	16,938	29,725
Louisiana	1,250	1,420	11.70	14.30	14,625	20,306
Texas	2,427	2,356	11.80	19.50	28,639	45,942
Oklahoma	836	950	10.50	15.10	8,611	14,345
Arkansas	1,459	1,586	8.30	12.50	12,839	19,825
Montana	200	175	16.80	20.00	3,300	3,500
Wyoming	57	60	14.00	18.40	798	1,104
Colorado	325	382	12.30	18.00	3,998	6,876
New Mexico	85	83	15.00	21.80	1,275	1,809
Arizona	40	42	16.00	18.00	640	756
Utah	103	114	13.00	15.00	1,339	1,710
Nevada	30	32	11.00	14.00	330	448
Idaho	163	190	12.50	17.80	2,038	3,382
Washington	267	300	15.00	23.30	4,005	6,990
Oregon	272	302	12.80	19.50	3,482	5,889
California	930	1,033	14.50	18.00	13,485	18,594
United States	66,649	71,727	12.99	19.01	865,633	1,363,269

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